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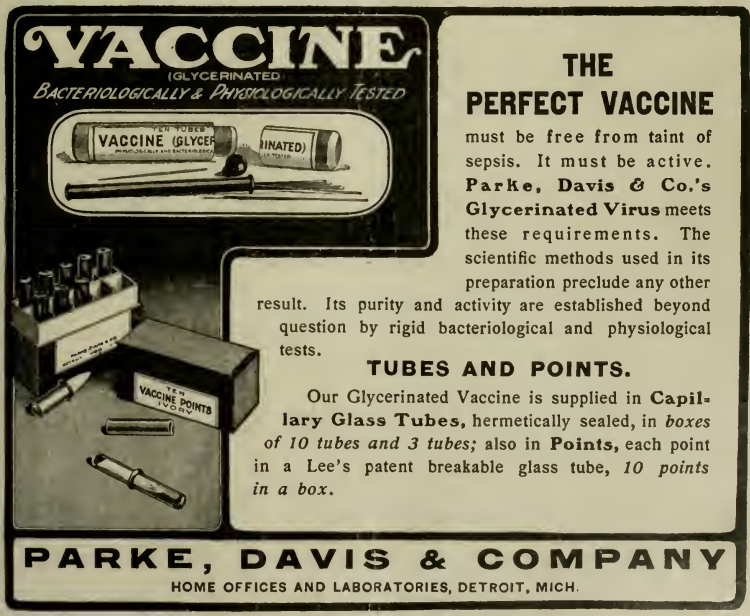
Twenty-Seventh Year. JANUARY, 1904. **Vol. 50. No. 1.**

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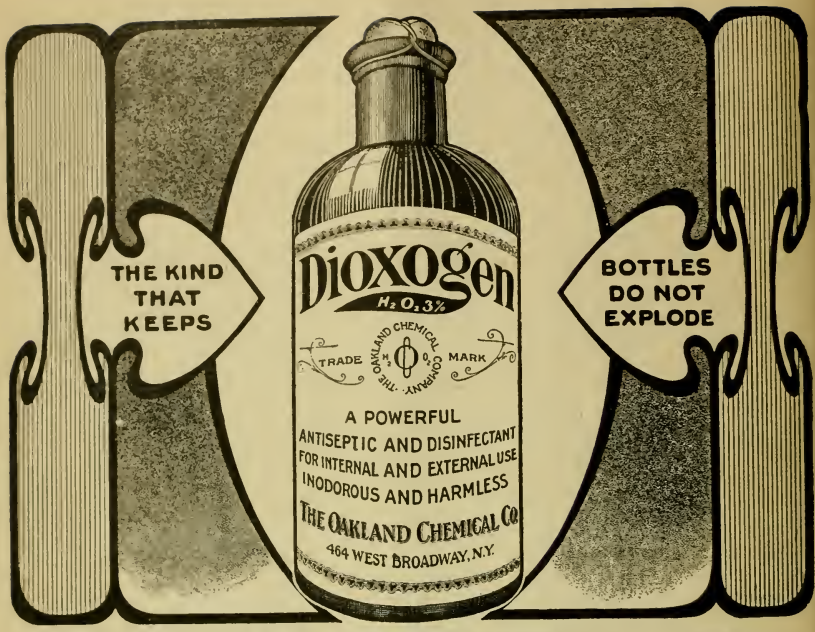
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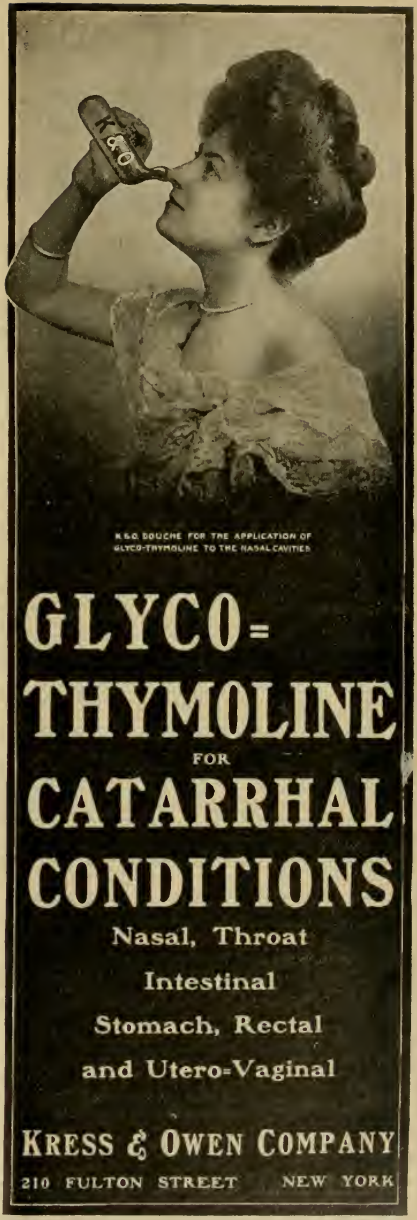
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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Lobar Pneumonia in the Mountain Sections.*

By J. D. Roberts, Jefferson, N. C.

Lobar, croupous, or fibrinous inflammation of the lung tissue is not confined to any section. It is no respector of age, sex, social state, conditions as to environments, locality, or climate. While the seasons have an influence on the ratio of cases, it is confined to no period. With a large death rate, many complications, a foe to old age, its presence in all climes, its universality in attacking people of all classes and conditions, its liability to return, its oftimes epidemic character, its general impairment of health, make its consideration by the profession of first importance.

A practice of several years in the eastern section of North Carolina, in an altitude of 300 feet above the sea level, followed by five years practice in the mountain section of the State in an altitude of 3,000 to 4,000 feet, with an average experience in treating pneumonia, has let me note some differences in the character of the disease in the two sections.

The principal etiological factor—*the Lanceolatus Pneumoni cocus*—is present in all or very nearly all cases. Some secondary, predisposing or exciting causes are in greater evidence in mountain sections, and the prevalence of the disease, especially in the winter months, is more general. The ratio of cases covering the physician's attention is much larger in the months from December to April inclusive, than is given by the text books generally. The other seven months, while not free from its presence, do not present anything like the same proportion of cases to the whole number as is found in lower altitudes. It cannot be claimed that altitude controls this feature, but should probably be attributed to some other conditions existing. Cold has long been recognized as a predisposing cause of pneumonia. The character of the cold or the conditions accompanying a fall in tem-

*Read before the Ashe County Medical Society, December 7, 1903.

perature must be considered in treating of it as a secondary etiological factor. An exposure to even a small fall in temperature with a humid atmosphere, is a prolific cause of the disease in a mountainous country, as in other sections, and as this is the prevailing state here for five months in the year, we have a large share of this trouble. My observations lead me to the conclusion that a very damp atmosphere, one surcharged with moisture, is much more to be dreaded as a cause of pneumonia than cold with a light or dry atmosphere.

While the snow fall in this section is not so great as elsewhere, the frequent changes in the temperature, the partial melting and the clay soil making the drainage imperfect, keeps the ground in a damp or almost wet condition, with an abundance of mud throughout the winter months. It is therefore impracticable, if not impossible, to be out on foot without experiencing cold feet to a degree more or less according to the amount of travel and the character of the foot wear. The long, hard winter, high winds, sudden variations in the temperature and humid atmosphere all combined have a very depressing effect upon the system, and many succumb in the latter months without any appreciable predisposing cause.

As a sequel to other diseases, I have noted but few differences in the mountains as compared with other sections. Pneumonia has a tendency to attack a system run down or depressed from any cause, and its occurrence after low forms of fever, as typhoid or long continued rheumatism, is to be guarded against. I have found it following la grippe more often than any other disease, and, too, more frequent and dangerous as a complication of this disease than in lower and warmer climates. I am unable to account for the peculiarity in this respect, unless it be from the rapidity of the invasion when following or complicating grippe, which I have noted here, though Osler, in his work, claims that it is insidious in its manifestations. Though pneumonia has long been recognized as the most general and fatal complication of grippe, I have not seen it elsewhere to the extent as here.

Pneumonia in alcoholic patients, the most fatal and most to be dreaded of all forms, is not so prevalent here, owing to there being no large towns and habitual drinking not being so common in rural districts. A few cases have occurred in my practice from exposure while on a spree, but if the patient be robust and indulging only occasionally in liquors to an excess, the case runs a usual course.

The epidemic feature of pneumonia is not pronounced in the mountains, though there have been one or two quite severe ones in the past five years, notably in February and March of 1900. This accompanied an epidemic of grippe and more than one case was often found in the same household, occasionally as many as three. It does not spread from house to house to the same extent as in towns and cities, nor possibly to the extent it does in lower and nearer level districts.

The most serious complication presented in this section is with the heart. I have no statistics at hand on this question of heart disease in the mountain districts, but my observation leads me to the conclusion that as a general thing they are more frequent. Pneumonia, especially of the left side, is in the large majority of cases attended with pericarditis and other forms of heart trouble are by no means rare, endocarditis being especially troublesome in long-continued cases.

A well developed case of pneumonia without some inflammation of the pleura, is rare, and I have noted no differ-

ence in this respect. Gastric and bowel troubles are but little different from other localities; if anything, less troublesome here than elsewhere.

The serious complications of meningitis, especially with children, has been, in my personal experience, very limited in number. In five years' practice here I have met with only two cases of meningitis, both in children with penumonia, one of which was fatal.

The symptoms and course of uncomplicated cases present no differences so far as I have been able to observe, nor are the sequelae here different from other sections. Convalescence is possibly a shade more tedious and recurrences more frequent. One patient under my care has missed only one spring in the past four of an attack of the disease. In this case I have not noted any special differences as to the severity of the frequent attacks.

The treatment demanded here and generally followed is similar to the general plan elsewhere. There being no known remedy to abort the disease or to hasten to any appreciable extent the crisis, supportive measures, making the patient as comfortable as possible, watching for complications or untoward symptoms are indicated. I look upon opium in some form as the principal remedy for the relief of pain; local applications to the chest are freely used; cold applications I prefer, if well borne, otherwise hot ones. In cases easily chilled I cover the whole chest with cotton batting and woolen bandage, with a large degree of comfort to the patient. In the earlier stages, with full bounding pulse, I rely on aconite or veratria, though used with caution. Sponge baths are preferable to the coal tar derivations as an antipyretic, and are used with tepid or even cold water when indicated. Cough is controled with opium, and expectorants are used sparingly. Bromides are used freely for cerebral symptoms and the bromide of ammonium in adynamic conditions. Nux vomica or strychnia is given in nearly all the cases in the latter stage, both for the general tonic effect and as a cardiac stimulant. Alcohol is beneficial in many cases, especially of children, and in those assuming a typhoid condition, I am not partial to the use of digitallis in the heart failures of pneumonia, though I do occasionally administer it in cases of very quick, feeble pulse.

There is a general impression that the mortality from pneumonia is much greater in the mountains, but I cannot say I find it so. Hospital statistics give a mortality of from 20 to 40 per cent. My own ratio in the eastern part of the State was 10 to 12 per cent., and while I have not kept a strict record here, the death rate will not, I am sure, exceed one in eight.

Bacteriology of Acute Lobar Pneumonia.*

By J. Larkin Ballou, M. D., Crumpler, N. C.

As we understand lobar pneumonia today, the exciting cause is the micrococcus lanciolatus, pneumococcus, or diplococcus pneumonia of Fraenkel.

This bacterium, which belongs to the coccus family, occurs in pairs and is inclosed by a capsule, except when grown outside the body. It is found in the mouth of one out of every five healthy persons. It is also found in the dust and sweepings of rooms which no doubt is a result of the filthy habit of expectorating promiscuously over the floor. It is also found in the bronchial secretions and affected lungs of 80 per cent. of the cases of pneumonia, and it is a well established fact that this germ is found

*Read before the Ashe County Medical Society, December 7, 1903.

in the saliva of persons for months or even years after an attack.

It may be present with other diseases than pneumonia, as pleurisy, pericarditis, meningitis, peritonitis, acute synovitis, endocarditis, complicating inflammations, and has been met with in pure cultures in the inflammations of the serous membranes. It is most frequently the cause of meningitis. It rarely gains admission into the blood; however, this does occur, in which case a true pneumococcus septicemia names the condition, and death of the patient results.

This disease may readily be produced experimentally in animals by injecting the diplococcus pneumonia of Fraenkel into the trachea. I have made the following experiment. Three rabbits were taken, and into the trachea of one the diplococcus pneumonia of Fraenkel was injected, resulting in a bilateral pneumonia, the lower lobe of each lung being invaded; into the trachea of another rabbit the typhoid bacillus was injected, resulting in pneumonia of the lower lobe of the right lung; into the trachea of the third rabbit was injected the Klebs Loeffler, or diphtheria bacillus, resulting in pneumonia of the lower lobe of the right lung and the formation of a pseudo-membrane in the trachea and bronchii.

In some cases of lobar pneumonia, microscopical examination shows the infection to be mixed with other bacteria than the pneumococcus, such as the staphylococcus, and streptococcus pyogenesis, and there are pneumonias entirely free from the pneumococcus, caused by the staphylococcus, typhoid bacillus, the Klebs Laeffler or diphtheria bacillus, the colon bacillus, which often follows a strangulated hernia, severe colon impaction, intussusception, volvulus, etc., when the onset is typical it is caused by the true diplococcus pneumonia of Fraenkel. Many of the cases of pneumonia complicating typhoid are the result of the typhoid bacillus gaining access to the lungs, and in this case one would not be immune, for a short time, because the anti-pneumotoxins (shortly to be spoken of) are not in existence, nor predisposed later on to pneumonia, because the pneumococcus is not ordinarily present in the saliva.

The Widal reaction and the Diazo test are both positive in a great majority of the cases of pneumonia caused by the typhoid bacillus, even when there is no enteric typhoid present—this is accounted for, in the Widal reaction, by the presence of the anti-typhotaxins; and in the Diazo test, probably by the typhotoxins.

The bacillus pneumonia of Friedlander we shall not discuss, as its etiological relation to the disease is still mooted. It is claimed by some that lobular pneumonia is also caused by the pneumococcus.

The symptoms of pneumonia are not caused by the pneumococcus being distributed through the system, but by the toxins which are absorbed from the infected area where the bacteria are growing. From this it is plainly seen why we said above that a pneumonia with the typical onset is always caused by the diplococcus pneumonia of Fraenkel, since other bacteria would produce other toxins which, acting differently on the system, produce different symptoms. If the pneumococcus be grown outside the body in bouillon, and this bouillon passed through an unglazed porcelain filter which clears it of the bacteria, but not of the toxins, then the bouillon or glycerine extract be injected into the subcutaneous tissues or into a vein, many of the symptoms of pneumonia, as chill, headache, general pains, rise of temperature, quick pulse, flushed face,

bright eyes, anxious expression, etc., will result, but of course the physical signs are absent. These toxines are called pneumotoxins, and when they get into the system the leucocytes go to work making an antitoxin called anti-pneumotoxin, which, when produced in sufficient quantity, neutralizes the action of the toxins. It is then that the crisis occurs. The anti-pneumotoxins, being the antidote of the toxins produced by the pneucoccus, overcomes the action of the toxins, and cures the disease. It does not kill the pneumococcus or stop its power of forming toxins, this being demonstrated by the presence of the bacteria in the saliva, after recovery from an attack, which are capable of producing the toxins. These anti-pneumotoxins can be produced in the body of the lower animals, as the mouse or rabbit, and collected in very much the same way as are anti-diphtheritic-toxins. Now if we inject the pneumococcus into the trachea of a rabbit and produce pneumonia, then in a few hours after the onset inject the anti-pneumotoxins, the temperature will be normal in twenty-four hours, and a cure will result; or if we inject the antitoxin serum first we will not have the onset, because we have immunized the animal. This immunity lasts but a short time—rarely more than six months, but is transmitted to the offspring born during the time. Some writers claim that after the immunity gives out, a predisposition exists. I think we are justified in concluding that the predisposition exists in those cases where infection has been present, and not where immunized doses were given the animal. It stands to reason that since immunity last but a short time, and the diplococcus pneumonia of Fraenkel is found in the saliva for years after the recovery, the same person would be more subject to the disease. All that is necessary is a proper preparation of the soil by lowering the vitality because the pneumococcus is present and the immunity has passed away.

There has not as yet, so far as I know, been a satisfactory serum therapy established for man, although serum taken from man after the crisis will cure a goodly number of cases in the lower animals. This antipneumotoxin serum is of great importance and we have much to hope for from its hand when more thoroughly understood.

How to Treat a Common Cold Successfully.

By C. R. Marshall, M. D.

To be able to treat successfully an acute rhinitis, that is to treat it intelligently and in such a way as to cut short the attack and relieve the patient's suffering, is an accomplishment that the young practitioner should assiduously cultivate. Too often the request for "something for a cold" is given but scant attention, and the patient concludes, with Burns, that

"When fevers burn, or ague freezes,
Rheumatics gnaw, or cholic squeezes,
Our neighbor's sympathy may ease us
Wi' pitying moan."

Success in the treatment of minor ailments has been the foundation of many a medical reputation. Furthermore, the chances are that the young practitioner will see ten cases of trivial nature to one of serious import during the first year or two of his professional career. With these thoughts in mind, the writer presumes to offer a few practical suggestions upon the treatment of acute rhinitis, or a common "cold in the head."

This extremely disagreeable affection should be taken in hand as soon as recognized. The first symptoms, in the

great majority of cases, are sneezing and a serous discharge from one or both nostrils. Occasionally a case will be encountered in which objective symptoms are wanting, and instead the subjective symptom of soreness and discomfort in the post-nasal region will be described by the patient. In either event the treatment is about the same, in my experience. The first therapeutic measure to have attention is the promotion of the hepatic and other glandular secretions. This is accomplished by the administration every two hours, until three have been taken, of a chocolate coated tablet having the following composition:

Rx—

Hydrargyri chloridi mitis,	gr. 1-5
Pulv. Ipecacuanhae,	gr. 1-10
Sodii bicarbonatis,	gr. j

Two hours after administration of the last tablet a full dose of sodium phosphate is given; my preference being for a granular effervescent preparation, which is very easily taken even by children; in fact, it is about the only purgative "saline" that children will take.

The treatment of the rhinitis includes internal and topical medication. Internally I prescribe, to be taken every hour, a chocolate coated tablet composed as follows:

Rx—

Camphoræ,	gr. ss
Ext. Aconiti radicis,	gr. 1-10
Pulv. Opii,	gr. 1-10
Ammonium chloridi,	gr. ss
Quinine sulphatis,	gr. ss
Ext. Belladonnae foliorum,	gr. 1-20

This tablet alone will reduce secretion, allay post-nasal irritation and in many cases be all that is necessary to completely check the progress of a very annoying and distressing cold. In more obstinate cases, especially those attended with occlusion of the nares, the application of a 1-5000 solution of adrenalin chloride will be necessary and will afford much relief and hasten resolution. This solution is prepared by adding thirty minims of the 1-1000 solution, supplied by Messrs. Parke, Davis & Co., to two fluidrachms of normal salt solution. It is applied by means of an atomizer, or with the cotton applicator. With these measures rigorously prosecuted, the treatment of a cold becomes a simple matter, and the results will not only prove most agreeable to the patient, but profitable to the physician.

To recapitulate: The treatment of an attack of acute rhinitis includes—

General Treatment—.Stimulation of hepatic and other secretions by administration of calomel, ipecac and sodium bicarbonate, followed by sodium phosphate.

Specific Treatment (Constitutional).—Internal administration of the camphor, aconite and opium combination to check nasal discharge.

Specific Treatment (Local).—Topical application of solution adrenalin chloride 1-5000 or 1-10,000, to allay inflammation, reduce tumefaction and check exudation of serum.

Catarrhal Diseases of the Upper Air Passages.

By Clarence G. Clark, M. D., Assistant Surgeon to Presbyterian Hospital, O. P. D., New York; Formerly Assi tant Surgeon to New York Hospital, O. P. D.

Among the diseases of the upper air passages we have, first, two varieties, acute nasal catarrh and chronic or nasopharyngeal catarrh. In the latter subdivision we have the atrophic and hypertrophic varieties and the form which is a mere manifestation of some general systemic diseases, i. e., the ozaena of syphilitics. The first two varieties are merely different degrees of the same process. The nasal membrane after a

series of acute attacks become chronically inflamed with a muco-purulent discharge. The membrane is congested and covered with a thin muco-pus. In this form treatment is most effective. But as the disease progresses the membrane becomes hypertropic and a chronic tenacious mucus is secreted. This hypertrophic form is generally accompanied by a stenosis of the upper air passages, especially on the convex surfaces of turbinated bones, which eventually becomes enlarged and there is a constant dropping of mucus into the back of the throat. Still more chronic is that atropic catarrh where the mucus is atrophied and the secretion is dried up.

The treatment of these cases is simple if seen at the outset. The principle of cleanliness underlies the whole thing. The patient should be supplied with some good alkaline solution, such as Glyco-Thymoline, and instructed to douche the nasal passages twice daily. This, with proper hygienic managing of the case is all that is necessary in the majority of these cases seen at the beginning of their chronicity. If the follicles are hypertrophied they may be touched up with the Galvano-Cautery. This especially applies to the nasopharynx.

The best form of douche for use in these cases is the Bermingham. It is easy for the patient to use this douche and its sizes make it convenient to carry. It is a bad practice to use a syringe, as too much force may force the discharge into the frontal sinus and cause unpleasant complications. If the turbinated bones are greatly enlarged, an operation for their removal is necessary before treatment can be effective.

For use in the douche I have found Glyco-Thymoline to be an excellent preparation. It has the advantage of being alkaline and at the same time it is pleasant to use and does no harm if swallowed. The following cases will illustrate the treatment of these cases:

Case I.—Mr. A. B., age 35. Came to office on June 12, 1902, complaining of nasal discharge. History of several acute attacks of ordinary coryza, which gradually became more lasting. Is a heavy smoker and inhales smoke.

Examination.—Found nasal membrane congested and covered with tenacious mucus. Turbinated bones slightly hypertrophied.

Diagnosis.—Chronic nasal catarrh, becoming hypertrophic.

Treatment Prescribed—

Rx—

Ac. Tannici		gr. xx
Ac. Sulph. Arom.		M. xxx
Glyco. Thymoline		oz. iii
Aqua dist.	q. s.	oz. viii

and instructed patient to use same in Bermingham douche twice daily, first cleansing the nasal membrane with a salt solution dr. i to quart of warm water.

As the discharge became less tenacious and less profuse, I stopped the astringents and had patient continue with Glyco-Thymoline in proportion of one part in four of water. With this treatment the discharge ceased in three weeks and patient was discharged with instructions to continue using the douche daily.

Case II.—Miss J., age 24. Came to office July 10, 1903. Has acute coryza, running from nose and eyes. Discharge thin mucus. Alae nasi excoriated. History of frequent previous attacks.

Diagnosis.—Acute Coryza.

Treatment—

Rx—

Atrophin sulph.	gr. 1-10
Pulv. Ipecac et Op.	gr. iv
M et ft pulv. no.	viii

Sig.: One every four hours.

Also instructed patient to douche every three hours with—

Rx—

Glyco-Thymoline	oz ii
Aq.	q. s. oz. vi

This latter to be used in Bermingham douche. This attack subsided in ten days and patient continued using the douche daily thereafter, and up to the present time has had no similar attacks. I lay this to the constant cleansing of the nasal membrane.

Bronchial and Laryngeal Inflammations--Typical Features and Treatment.

By Uriel S. Boone, A. M , Ph. G., M. D., Professor of Pharmacology and Surgery, College of Physicians and Surgeons, St. Louis, Mo.

Much has been written by both European and American medical men regarding heroin, particularly by Hyams, Geis, Fulton, Einhorn, Wilsner, Manges and Floeckinger, but I will only make excerpts from the article of Prof. Benno Hyams, of New York City, in the *Medical News*. He writes:

"Of the many drugs brought to the attention of the general practitioner, there is one, namely., heroin, which by virtue of its efficacy and therapeutic value, bids fair to assume a permanent and prominent place in our pharmacopoeia. Heroin, like antikamnia, needs little or no recommendation nowadays, for its favorable effect in all diseases of the respiratory tract is so generally recognized, and the clinical results obtained by medical men are so uniform that a record of special individual cases is of no particular interest. The object of this article is to point out the remedial excellence of these two drugs when administered together. Their exhibition in combination is, I think, a new departure in therapeutics and one worthy of more than passing attention."

By way of explanation, let me state that Prof. Hyams refers in his article to the salt, heroin hydrochloride which, owing to its greater adaptability, is preferred for general use. Its physiological action, as Prof. Hyams says, has been aptly and concisely described as that of a "respiratory stimulant and a sedative to the respiratory mucous membrane." Its action in relieving cough and dyspnoea is prompt. It has little if any antipyretic properties; its action on the temperature is not marked, pronounced or constant. In most cases there was apparently a slight reduction of temperature, but not sufficient to entitle it to practical consideration in this respect. Respiration he found greatly influenced in all cases and there was a decided diminution in the frequency of the respiratory movements, with a prolongation of the inspiration and an increase of the force of expiration. The elimination of bronchial secretion is promoted, thus aiding in the relief of dyspnoea. The pulse becomes slightly diminished in frequency and likewise somewhat fuller. Heroin is in no sense a hypnotic, except that it indirectly relieves the distressing symptoms which prevent sleep. In therapeutic doses there is no disturbance of the gastric functions. Except for a slight nausea noticed in one case, no ill effects were observed . Its action on the intestine seemed to be a slightly constipating one. To overcome this it may be advantageously combined with cascarin or some other reliable laxative. The drug is well borne in both the young and the old, especially so in the former, and this is considered a point of special moment. As an anodyne in painful affections it ranks much below morphine. The average dosage by mouth is from 1-24 to 1-6 grain, three times daily, 1-12 grain being the most desirable adult dose. It is preferably given after meals, especially when there is a diminution of gastric secretion. After the prolonged use of

the drug, as in tuberculosis, larger doses are required. Administered internally, heroin hydrochloride is incompatible with the stronger alkalies and particularly with apomorphia.

Prof. Hyams further states, in summing up, that heroin hydrochloride is indicated in coughs of all kinds, whatsoever the cause, in dyspnoea, and in all catarrhal inflammations of the respiratory mucous membrane, and in all cases in which morphine is contra-indicated. In acute bronchitis it seems to be particularly effective, in chronic bronchitis, as well as in asthmatic conditions, it is of much value, in whooping cough, its action proved palliative. In pulmonary tuberculosis he regards this drug as one of the best remedies with which to combat the cough, dyspnoea and night sweats, as it can be used for long periods without dangerous sequelae, and at the same time exerts the effect before mentioned, making it peculiarly suited to the treatment of this often protracted disease. From clinical cases I find the above to be in full accord with my experience, but to fully illustrate the better results obtainable when antikamnia and heroin are combined, I submit three cases, each one presenting typical features. Neither in these nor in any other of my cases were untoward after effects evidenced.

Case I.—J. P., athlete. Suffering from acute cold. On examination found temperature 101 degrees, with a cough and bronchial rales. Patient complained of pain induced by constant coughing. Prescribed antikamnia and heroin tablets, one every four hours. After taking six tablets the cough was entirely relieved. Patient continued taking one tablet three times daily for three days, when he ceased taking them and there has been no return of the cough or pain.

Case II.—Ed. H., aged 30. Family history—hereditary consumption. Hemorrhage from lungs eighteen months ago. His physician had me examine sputum; found tubercle bacilli. After prescribing remedies with very little improvement, I placed him on antikamnia heroin tablets, prescribing one tablet three times a day and one on retiring. He has since thanked me for saving him many sleepless night, and while I am aware he never can be cured, relief has been to him a great pleasure and one which he has not been able to get heretofore.

Case III.—Wm. S., aged 38. Lost 25 pounds in last 30 days. Consulted me July 9th. I thought he would most certainly fall victim to tuberculosis. Evening temperature 101 degrees, with night-sweats and a very troublesome cough with lancinating pains. Prescribed 1-100 gr. atropine to relieve the excessive night-sweats and one antikamnia and heroin tablet every three hours, with the result that he has entirely recovered, and is now at work as usual.

We have in this combination of antikamnia and heroin, first, a respiratory stimulant and a sedative to the respiratory mucous membrane; and, second, the benefit of an unexcelled and thoroughly tested analgesic, antipyretic and anodyne. My individual cases, as will be noted, were all treated with "Antikamnia & Heroin Tablets," each containing 5 gr. antikamnia and 1-12 gr. heroin hydrochloride, and I must state that this tablet in my experience constitutes the safest and most efficient remedy in the treatment of coughs, dyspnoea, phthisis, bronchial and laryngeal affections, pneumonia and all acute inflammations of the air passages. They have also been employed with very great success in hay fever, coryza, etc. They were soothing and comforting to my patients, and this, as every practitioner

will appreciate, is frequently of utmost importance.

Dr. Geis, of Brooklyn, N. Y., has had the same experience in the use of heroin in combination with the coal-tar analgesics. (See *New York Medical Journal*, December 1, 1900.) A few investigators with heroin hydrochloride have found that a feeling of slight nausea and dizziness at times follows its administration, particularly when the dosage is often repeated and continued for a period of several days. This feeling I find is not produced when antikamnia and heroin tablets are exhibited, as the action of antikamnia counteracts the unpleasant effect of heroin.

It will thus be seen that the combined or synergetic effect of these two remedies is necessarily far superior to the effect obtained from the administration of heroin hydrochloride alone, and there is no field for the use of this drug in which the addition of antikamnia will not be greatly beneficial. Antikamnia and heroin tablets may be exhibited in doses of one tablet every two, three or four hours, as indicated.

Practical Dietetics in the Treatment of Pneumonia.

By Dr. T. J. Biggs, Stamford, Conn.

Pneumonia is an infectious inflammatory disease of the lungs, accompanied by grave constitutional disturbances, such as fever and rapid enfeebled heart action. The mortality at some seasons of the year, and especially among debilitated or alcoholic patients, is so great it is exceedingly important to maintain the strength of the patient through the few days during which the fever lasts, or until the crisis by which it terminates has been reached. All danger, however, is not then over, and convalescence in all cases, and especially in aged persons and those poorly nourished must be promoted by careful and proper and complete dietetic treatment.

In the treatment of pneumonia it is most essential to give a proper diet which will not excite the cough in swallowing, or increase the dyspnoea by distention of the stomach, or augment the enfeeblement of the heart's action by overtaxing the digestive powers, and at the same time supply perfect nutrition. Vomiting should be especially guarded against, and if nausea exists, it is usually the fault of the food given, and efforts should be made at once to control it. It is not well as is so often done, to keep a patient upon a rigid milk diet, and it is advisable to give nothing else while the acute symptoms last which will tax the digestive system. The various articles employed, such as whey, meat juice, broths, egg albumen, etc., are insufficient to sustain the patient's strength. They are often well borne as far as the stomach is concerned, but the general nutrition invariably suffers thereby lessening the patient's chances of fighting this dread condition.

Starchy and saccharine food must be withheld. Cold drinks are both beneficial and acceptable to the patient, and water plain or aerated may be drunk in considerable quantity. It is highly necessary that the normal activity of the kidneys be kept up, that the poison which occasions the constitutional symptoms of the disease may be better eliminated. There are cases, however, among persons with robust circulation, in which the onset is very sudden and violent. The pulse is full and bounding, and the heart is greatly overworked by the effort to propel a large volume of imperfectly aerated blood. In such instances the addition of large quantities of fluid to the circulation, besides what is actually required for nutrition, may have the effect of still further straining the heart. The diet should

be kept absolutely fluid until defervescence has occurred, with a normal temperature and commencing disappearance of the exudation. In fact, it is well to prolong the fluid diet for three or four days after the temperature has become normal, in order to make sure that a relapse of the fever is not likely to follow. In those cases in which resolution is postponed and the patient becomes more and more feeble, although the temperature may be nearly or quite normal, it is highly desirable to give a greater degree of nutrition. This is usually accomplished imperfectly by the physician's ordering somewhat earlier scraped beef, milk toast, or a soft cooked egg, all of which I find is apt to interfere with absolute and perfect convalescence. And in this age of important foods it is highly unnecessary. To meet all indications in the dietetic treatment of pneumonia, there is but one food equal to every emergency, namely, bovinine. It is a highly concentrated food, stimulant and tonic, and exactly indicated in this condition, containing, as it does, complete and entire nutrition and proper stimulation, thereby supplying to the lowered vitality just what is required, without overtaxing the enfeebled digestion, requiring as it does, no digestion, but being ready for immediate assimilation. It also reduces the viscidity of the sputum. I know of no other food that will do this. During the entire period of convalescence I employed the bovinine, returning slowly to the solid food, according to the condition of the patient. There need be no fear in keeping a patient, I have found, on bovinine indefinitely, for it sustains them in every detail. The bovinine is exceptionally well borne and undoubtedly serves through the acute stage not only as a food, but as a support to the overworked heart. The fact that its volatile elements are thoroughly oxydized in the circulation or tissues is demonstrated by the large quantities which patients can often digest, and absorb without toxic symptoms. Doses may thus be tolerated which in health would ordinarily not agree with the patient. In alcoholic subjects, who have been drinking up to the time of the onset of the pneumonia, it is indispensable to continue (I find) the use of bovinine, for the sudden withdrawal of the stimulating effect of the alcohol on the organism may give rise to rapid collapse. Bovinine meets this indication exactly. In aged and constitutionally weak persons it is also important that its use should be begun early in considerable quantities, the amount being gauged according to its effect. In extreme cases I have found from a teaspoonful to three teaspoonfuls every hour or two gives the best results, but ordinarily from a tablespoonful to a wineglassful from every two to three or four hours, will give best results.

So long as the pulse is slowed and its force strengthened, the use of bovinine in large quantities is most beneficial, but if delirium is increased, it is an indication that the patient is not properly eliminating, and the dosage should be a small one oft repeated. Broncopneumonia is common at the extremes of age—in the very old and very young, and is always a very critical disease and the utmost care is required in nursing and feeding. The diet should consist of foods that are readily digested and at the same time give entire and complete nutrition and stimulation. There is but one food which will accomplish this. Bovinine stimulation is early required and in considerable quantity. Bovinine in a little sweetened water, cold, should be systematically given, especially to small children who are unable to make their want of drink known.

Five to ten drops every hour to two hours, as necessary. Bovinine given in vichy or milk for children or elderly people, will have the effect of lessening the tenacious mucous and easing the cough. If there is a tendency to flatulency, however, aerated waters had better be avoided, as a vehicle for the bovinine. When the disease occurs in children the bovinine is exactly indicated, as it will foster the strength and not tax the digestive organs in the little sufferers. It should be given every hour to every three hours in milk. Later if the acute symptoms have subsided, it may be given in any cold pabulum desirable.

PNEUMONIA.*

By M. L. Smoot, M. D., Salisbury, N. C.

Mr. President, and Gentlemen of the Rowan County Medical Society:

I shall preface my remarks by saying that I cannot hope to bring to the attention of this reading and thinking body of men anything entirely new under the sun on the time honored and interesting subject of pneumonia—interesting from the facts that its mortality rate is lessening little, if any, in these latter years, and that in this changeable climate we have quite a lot of it to contend with. It is thus easily seen how important it is that we "put our heads together" as it were, to stop the ravages of this relentless foe of the race.

I shall feel that I have been well repaid if, by the mere mention of this subject, I can draw out the facts concerning and relative to pneumonia, which have been gleaned by the members of this body from the literature of the day and from their own experience at the bedside.

To but mention a subject of such vital importance and of so much interest before this society is to guarantee its thorough discussion; therefore, it would be the height of folly for the writer of this paper to enter into a discussion of the various phases of pneumonia, for they are many. Only a few fundamental facts relative to the disease will be mentioned, leaving the more intricate problems to be discussed openly by older and wiser heads.

The word pneumonia, without qualification, implies lobar pneumonia, but it was the purpose of the writer to touch also on broncho-pneumonia, or rather, to carry them along together in somewhat of a comparative manner.

The manifestations of the two varieties are easy enough to separate when in well defined cases, but in many cases the differential points are hard to make out.

The history of pneumonia dates back to Hippocrates who tersely defines it as a disease "quickly fatal and characterized by sputa of various colors"—a definition often applicable in its entirety here in the twentieth century. But we have at least learned quite a good deal of its etiology. Formerly it was supposed to be due to extremes of temperature and, of course, such exposure was and is a predisposing cause. In fact, old fogy as it may seem, I believe that exposure to extremes of temperature may cause it now, independent of micro-organism. For, if the body be suddenly subjected to extreme cold after being in a warm room with all the cutaneous vessels dilated and full, the tissues relaxed, the pores of the skin open, why should not this opposite extreme, by its vaso-constricting action, drive the blood in and dam it up internally? This stagnation of the circulation may as easily take place in the lungs as elsewhere, and *more* easi-

Read before the Rowan County Medical Society at its meeting in January, 1904.

ly if these be in a condition of lowered vitality from any cause whatsoever.

With a stagnation of the circulation in the capillaries surrounding the air vesicles, why should there not be the same infiltration of these vesicles as well as the other phenomena of inflammation about the lung tissue?

True, I hardly think we could find a case where no germs were present, for germs, like the poor "we have with us always," whether we are made cognizant of the fact or not. But I merely mention this fact as a reasonable possibility and make no attempt to break down the germ theory of the disease. On the contrary, I believe that *all typical* cases of lobar and *many* cases of broncho-pneumonia are due to the presence in the lung of the pneumococcus, although the microscopists fail to find them in not more than 75 per cent. of the former cases and not more than half that per cent. of the latter. The point I sought to make was, simply, that in certain typical cases we would have lung involvement of sufficient intensity to be classed as pneumonia, even if we could eliminate all germs from the system. For this reason, I contend that in quite a few cases of acute lung involvement—commonly called by the broad term pneumonia—it is useless for us to expect the microscope to reveal to us Fraenkel's diplococci.

That all *true croupous* pneumonias are due to the pneumococcus and that in all pneumococcal infections of the lung we have the same general symptomology I have not the slightest doubt. It is very reasonable to conclude that leucocytosis would be retarded in one case and accelerated in another, depending upon the general condition of the individual, thus giving us varying manifestations of the disease, although the exciting cause is identically the same.

Just as the pus producing organisms produce the same general phenomena under like conditions of resistance, why should not the pneumococcus produce practically the same results in different individuals under similar circumstances? Of course it is easy to see how outside infection may be added. A lung crippled by the irritation of myriads of pneumocci in its substance is an easy victim to other infection which may be lurking near by; and since we are taught in the very fundamentals of bacteriology that each germ has its special function, it is easily understood that we *must* get outside infection in order to produce gangrene, pus ,etc., which we sometimes have in pneumonia.

The whole situation is different in broncho-pneumonia. A sneak thief disease in its habits, it almost always attacks debilitated and defenceless individuals at the extremes of life.

While the pneumococcus is perhaps quite often the first germ on the field, others soon put in their appearance and make their presence felt. Often others are present at the outset as where the pneumonia follows diphtheria, influenza, infectious diseases, etc. In this condition it is no trouble for almost any germ that may wander along to get a foothold and do mischief. Certain it is that we rarely see a case, if ever, where there is not mixed infection.

Thus while we should expect to find practically the same manifestations in all cases of the lobar type, we should just as reasonably expect to find widely varying manifestations in the broncho or lobular type of the disease.

We have paused long enough to look into the etiology of the trouble and passing over the pathology and symptomatology, let us look briefly into its treatment. To begin with, let us decide whether we have a local trouble with constitutional symptoms, a constitu-

tional disease with local manifestations to deal with in order that we may more intelligently arrive at a conclusion. Personally, I consider it a local trouble with constitutional symptoms. Unless we have evidence that the lung involvement is secondary to pathological conditions elsewhere in the body, why should it not be classed as a local trouble? In what respect would it then differ from diphtheria, which is commonly considered a local disease, and if causing death otherwise than by mere mechanical asphyxia doing so by the poison manufactured in the throat and sent out into the general circulation?

Certain it is that about the first thing we notice when called to see a case of pneumonia is the hurried, labored and painful respiration and other characteristic symptoms of lung trouble. If we can't find involvement of any part of the economy back of the lung involvement, why assume that there was involvement back of it? Why not do what seems more reasonable to me, viz., consider the lung as the sole cause of the trouble, therefore a local trouble, and treat it accordingly? No one would think for a moment of calling a severe wound of the foot anything but a local trouble, and yet infection of that foot may be so intense as to cause the most pronounced constitutional symptoms.

Assuming then that the disease is a local one, I shall refer briefly to a few special points in its treatment, leaving the regular routine of "rest in bed, even temperature of the room," etc., out of the present discussion, for although it is of vital importance, I regard it as an unnecessary consumption of time here.

Uncomplicated pneumonia is practically a self-limited disease, but of very great intensity, so that what we do must be done quickly. The blood vessels of the lung are torturous and swollen while mucus and epithelial debris are being dammed up in the air vesicles, thereby cutting off respiration and overtaxing the heart which is trying to keep the blood circulating.

Just here is where the practitioner of fifty years ago bled his patient and statistics prove that he got as good or better results than we get with the modern methods of treatment today. To lessen the volume of poison blood in an overfilled set of vessels and relieve an overworked heart is a reasonable thing to do. This may be replaced with normal saline solution if need be.

I should hesitate to do very much bleeding among the laity now without increasing my life insurance, but still it would not be a bad thing to do in a vigorous, plethoric patient. I consider it a better plan, however, to resort to vigorous counter irritation and even *blisters*.

This markedly relieves the distention and pain in the lung by the abstraction of the blood and lessens the work upon the heart.

In the case of blisters, which have largely fallen into disrepute, we can bleed our patient effectually and yet save his blood—i. e., we abstract the watery element of the blood and save the red blood cells for oxygenation purposes.

And now, if we are going to use a blister, when shall be do it? Dr. Tyson, in his valuable work, says: "A blister in pneumonia sometimes does good—especially in delayed resolution." I think I recall several other statements of like character by other prominent writers. But why, gentlemen, should we use it there? If we propose to use a blister at all, why not in the first and second stages when the heart has more to do than it can do and the respirations are quick and labored?

I see no special indication for a blis-

ter other than to relieve congestion, and if this be the case why not use it early when we have the congestion? In the stage of resolution stimulation rather than depression is the thing needful, and to be sure blistering is more or less depressing.

Hot applications may be sufficient in a great many cases. Holt, in treating of broncho-pneumonia in children, says that "hot applications, if used at all, should be used internally." This appears parodixical to me. I should rather put on a cotton jacket and let it be worn continually in order that an even temperature might be maintained.

Keeping up the heart's action is the most essential thing to be borne in mind in all cases. This is the disease where alcohol is at its best in point of usefulness. The patient needs vigorous stimulation almost from the very outset in order that he may overcome the intense intoxication. The heart, however, would fare better, I believe, if stimulants were more cautiously administered. It is useless to whip up the heart by excessive stimulation and try to make it pump blood through a lung almost as solid as a post. Why would it not be better to maintain the heart's tone by moderate doses of strychnine and leave the large doses of digitalis, etc., to tide over the crisis? Then, too, in the first and second stages some of the nitrites might be added to dilate the cutaneous vessels. These are good heart stimulants and may thus be made to fulfill a twofold purpose. I do *not* believe in the theory of giving veratrum and aconite in order to "bleed the patient into his own veins." They are too depressing on the heart and that is the very organ we wish to protect.

I believe we cannot be too careful in the withholding of antipyretic drugs which also are so depressing on the heart. The disease being so short in most cases, makes the fever of minor consideration any way, and if there *is* hyperpyrexia and great restlessness, ahe local application of cold is the easiest solution to the problem.

The use of the ice pack always struck me as being of doubtful utility, especially in private practice, but I have seen the cold sponge act nicely, and while its effects are more or less transient, there is no depression associated with its use. It seems hardly probable that hydrotherapy, however, will ever fill the important place here that it does in other fibrile conditions, e. g., typhoid fever, but yet it serves a very useful purpose in selected cases.

Perhaps in the not far distant future some pioneer will light upon a specific for pneumonia as that for diphtheria, but as yet efforts in that direction have given very unsatisfactory results. Let us hope for better things.

Plague Prophylaxis in India Abandoned.—It is reported that England has abandoned the endeavor to stop the ravages of the plague in India by the use prophylactic injections of serum. Although over two million people have died from the disease in the last few years and commerce has greatly suffered, the authorities have decided that the resistance and ignorant discontent of the natives are too much for them. After trying isolation, segregation and inoculation, the government finds that it is only undermining its power in the country. It would seem that England was as capable of giving a thorough test to the matter as any government, and the results are therefore of practical interest to the United States, as well as other nations which have oriental colonies.

Regarding Croupous Pneumonia, Especially Its Treatment With Carbonate of Creosote.—(By J. A. Scott, M. D., Physician to Pennsylvania Hospital; Adjunct Professor Clinical Medicine, University of Pennsylvania; and Chas. M. Montgomery, M. D., Resident Physician, Pennsylvania Hospital.)—Croupous pneumonia is one of the infectious diseases against which the medical profession has not been able to make more headway than did our forefathers. Thus, E. F. Wells (1) has collected 359,797 cases of croupous pneumonia covering a period of nearly one hundred years and gets a total mortality of 78,317 cases—21.8 per cent. In this same statistical article he finds there has been little or no change in the mortality curve in this period, but that, on the other hand, the proportion of deaths from pneumonia to the total number of deaths from all causes and the population has decidedly increased.

Thomas J. Mays (2) combats this statement that pneumonia is on an alarming increase, and produces charts to show that in the leading cities—New York, Boston, Philadelphia, Chicago, St. Louis, Buffalo, and San Francisco (Philadelphia and Chicago might be an exception to the rule, as in these cities the percentage of increase in the death rate from pneumonia between 1869 and 1902 is 83.33 per cent., and in Chicago 350 per cent.)—the percentage of pneumonia is not nearly so great as the diseases of the heart, which he states are much more alarmingly in evidence. The composite chart of all these cities shows an increase of 10 per cent. for pneumonia and 85.85 per cent. for diseases of the heart.

How to combat this tremendous mortality has greatly aroused all medical men, and the articles by Wilcox (4) and Van Zandt (5) regarding the efficacy of creasote carbonate in the treatment of pneumonia were read with great interest. Van Zandt's article contains a compilation or table of 1,130 cases treated by creosote carbonate, with 56 deaths.

It is obvious however to any one accustomed to deal with infectious diseases that the result of five or ten or fifteen cases in one physician's hands can be combined with the results of others to show most excellent percentages. Thus, many attending physicians to city hospitals see twenty or thirty cases of pneumonia without mortality, and then a batch of five or ten severe and fatal cases. Had these cases been put forward before any mortality occurred we at once have an ideal lot of figures; and this is the point in which the compilation of small figures do lie—they are not trustworthy sources from which to gather statistics. In the same line annual statistics are not absolutely trustworthy, for the mortality of the two most important acute infectious diseases, croupous pneumonia and typhoid fever, varies from year to year, and the results are perhaps best presented by decades, or at least in periods of five years. It is well understood by hospital physicians that typhoid may be of aggravated type one year (as it has been this year—hemorrhagic), and the following year may produce a mild type of infection. It is unwise, therefore, to premise too much upon the special treatment employed until some study of the mortality of several years is made.

Thus, the annual mortality in croupous pneumonia at the Pennsylvania Hospital from May, 1893, to May, is as

follows:

Cases.	Years	Mortality	Died within 24 hours	Per Ct.
59	1893-94	11	3	18.6
77	1894 95	18	3	23.6
58	1895 96	16	3	27 5
62	1896 97	12	5	19 3
76	1897-98	11	4	14 4
78	1898 99	13	4	16.6
169	1899-00	39	9	23.0
157	1900-01	31	2	19 7
211	1901 02	48	4	18 0
308	1902-03	58	16	18 8

The mortality from 1893 to 1898 is 20.5 per cent.; from 1898 to 1903 is 20.4 per cent.; or the mortality of the decade is 20.4 per cent.

Several facts are to be learned from the study of these previous figures. First, without proportionate increase of hospital facilities there had been a decided increase in the number of cases of croupous pneumonia, especially within the last four years. George W. Norris (6) also states that the increased prevalence has also been observed in the city death rate from this disease, which is corroborated by May's figures. Second, that there is at times a variation from 10 to 13 per cent. in the annual mortality from croupous pneumonia. Third, though the last five years show an increase of almost three times the total number of cases, the mortality percentage of these years is identical with that of the previous five years. While there is some difference in the treatment of pneumonia at the Pennsylvania Hospital, owing to the fact that slight variation of opinion may exist among the six attending physicians, it is mainly an expectant and symptomatic treatment, and the above disparity in mortality percentage has not been due to any special change in treatment from one year to the next, but rather to the greater virulence of the infection, the prevalence of influenza, etc. It is to be seen at once that for the last three years the mortality has been below 20 per cent., and the figures of 1903 (excluding the 16 cases that died within twenty-four hours after admission) are promising, 13 per cent. mortality.

We have prepared a table of 74 cases treated during the past winter, but on account of its size shall not print it in this article. Sixty-eight of them occurred at the Pennsylvania Hospital, five at the Priladelphia Polyclinic, and one in private practice. Sixty-seven of them were treated with carbonate of creosote, the adults usually receiving 10 to 15 minims in capsules every four hours; the children from 3 to 5 minims every fourth hour. Soce cases of special clinical interest in the group will subsequently be mentioned with an abstract of the fatal cases and the findings at autopsy, if secured.

In the 67 cases treated with creosote carbonate there occurred ten deaths, a mortality of 14.9 per cent.; seven cases with treatment other than creosote carbonate, one death—14.3 per cent.

If the cases (5) at the Polyclinic Hospital were not included in the table, the mortality percentage of the Psnnsylvania Hospital cases would be much improved (63 cases with 7 deaths—11.1 per cent). The five cases mentioned produced three deaths; four of them were the only truly epidemic pneumonias I (Scott) have ever seen. The original case was in a young colored woman with consolidation of the entire left lung, with thin, purulent sputum. Within forty-eight hours after her admission there occurred three additional cases among convalescent surgical cases occupying the neighboring beds, each presenting an initial chill, with the usual physical signs.

But one of the arguments of this paper is to show that it is the exclusion of such groups of cases that makes the un-

reliable statistics so frequently seen in the medical journals.

Of the patients in the table 63 were white, among whom there were 7 deaths; 11 were colored, among whom there were 4 deaths. There were 56 men, with 8 deaths; 18 women, with 3 deaths.

Reynold W. Wilcox (7) presents in his article 33 cases treated with carbonate of creosote with no deaths. He considers that the increased percentages of cases in which a crisis is noticed is angument of the valve of the remedy in nullifying the bacteriological activity and its results; in other words, he urges the use of carbonate of creosote to combat the toxemia of the disease. In his conclusions he advises among other things against the use of opiates and the slow acting heart remedies, such as digitalis.

For comparison with our figures, 67 cases with 10 deaths, about 15 per cent. mortality, we quote to you the cases occurring at the time in the wards of our colleague, Dr. A. V. Meigs: 31 cases with 7 deaths, a percentage of 22.5 per cent., treated with carbonate of ammonia. It must be recalled, however, that the combination of our figures with those of Dr. Meigs results in about the usual hospital percentage, and that during the past ten years these hospital figures have varied from 14.4 to 27.5 per cent.

CONCLUSIONS.

1. Carbonate of creosote causes no irritability of the stomach; in no case was there vomiting or any disturbance of the digestion; no disturbance of the urine was noted.

2. The degree of toxemia in all cases, barring the fatal ones, was mild; this is a difficult point to estimate, the extent of lung involved, temperature, etc., having little or nothing to do with it.

3. In the cases treated pseudocrises were common (15), but bore no relation to the crisis or the mortality.

4. The mortality percentage (14.9) secured in 67 cases treated with carbonate of creosote does not corroborate the unusually low figures secured by Wilcox, Van Zandt, and others; nor does this percentage—14.9 mortality—prove that the results are due to the treatment by creosote carbonte, as equally good results have been secured in past years by other methods in the same hospital.

5. The study of the clinical effects of carbonate of creosote should be continued; the dosage should be increased, and the effect upon the toxemia carefully watched.

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(3) *Jour. A. M. A.,* November 22, 1902.

(4) *Amer. Jour. Med. Sci.,* September, 1902.

(5) *N. Y. Med. Record,* October 18, 1902.

(6) *Amer. Jour. Med. Sci.,* June, 1901.

(7) *Amer. Jour. Med. Sci.,* September, 1902, p. 489.—*Therapeutic Gazette,* December 15, 1903.

This paper is part of an editorial by H. A. Hare, M. D., which appears in the same number of The *Pherapeutic Gazette* as the preceding paper by Drs. Scott and Montgomery. The ideas advanced by this eminent practitioner and teacher are always worthy of close consideration. He says:

We must, in discussing the value of any plan of treatment in relation to recovery and mortality, consider the type of the individual who is attacked by

pneumonia. Every one of experience will recollect instances in which the disease has attacked men who seemed remarkably strong and athletic, and who have speedily succumbed to its ravages, whereas others who, because of their feeble physique and slim stature, would, on general principles, be considered doomed, have suffered comparatively slightly, and speedily recovered. In other words, there are few diseases in the infectious group which vary so largely in their severity according to the physique of the patient.

Then, too, we all know what a very evil influence is exercised on these cases by any insufficiency or actual disease of the kidney; and in many instances persons who have not been suspected of presenting any evidence of renal disease are found, after they are taken ill with pneumonia, to be the unfortunate possessors of distinct renal lesions.

In regard to the question of the treatment of croupous pneumonia we are firmly convinced that the physician cannot, under any circumstances, cure the disease. It is typically one of the self-limited infectious maladies, and after it has developed the function of the physician is to guide his patient through his illness, being careful to give him no medicines which can possibly do harm, and use only those which will support him in his struggle with the disease.

Thus we can maintain the action of his bowels and kidneys so that poisonous materials will be speedily eliminated. For the latter purpose, occasional doses of calomel, particularly at the beginning of the disease, followed by a Seidlitz powder, or some other saline purgative, the use of a mixture of sweet spirits of nitre and citrate of potassium as an alkaline diuretic, and the employment of hypodermoclysis, using normal salt solution, a pint a day, to help flush the kidneys, are measures which may be employed in almost every case with advantage. In the way of stimulants, when they are acutely needed, we believe that Hoffman's anodyne and strychnine and atropine are the remedies which are of greatest value for any tendency to acute cardiac failure. Small doses of tincture of digitalis, 5 drops every six or eight hours, with 10 to 20 drops of tincture of belladonna, are also useful. It will be remembered, however, that we have frequently opposed the employment of strcycnnine, either by the mouth or hypodermically, throughout an entire attack of pneumonia on the ground that it is not a true stimulant, but is simply a whip, the power of which is soon lost if it is used too often. Again, we have more than once endeavored to dissuade our readers from the employment of nitroglycerine with the idea that it is a circulatory stimulant. Nitroglycerine exercises no favorable influence in pneumonia, unless the patient is one who ordinarily suffers from a condition of high arterial tension. Under these circumstances it is of value during the course of pneumonia just as it is of value for the circulatory condition before the pneumonia comes upon the patient.

Finally, attention may be called to the value of opiates in the treatment of pneumonia under two circumstances. One is the use of Dover's powder, or morphine, in the early stages of pneumonia to relieve pain when it is excessive, and the other is the employment of an opiate, preferably morphine hypodermically, for the purpose of giving the patient rest when, because of pain or delirium, persistent insomnia with constant tossing does much toward exhausting the heart and nervous system. Again and again we have seen life saved by the timely use of morphine in this manner. But it should not be used

constantly, and only when we feel confident that it is absolutely essential that the patient should have quiet. In persons of advanced years suffering from renal leisons, it may not be wise to administer opiates, owing to their well known influence in diminishing renal activity, and under these circumstances the physician must carefully consider the question of the condition of the kidneys, and, it may be, will have to rely upon the bromides to produce nervous quiet.

We cannot help hoping that in the not far distant future, through our increasing knowledge of the blood changes in pneumonia, and through the studies which are being made in regard to antitoxic bodies and immunity, some plan of treatment will be devised which will do much toward saving life in this most mortal disease. It must be remembered, however, that pneumonia will still continue to claim its victims among those who are already sufferers from kidney or cardiac lesions, and that no remedy will be able to preserve the life of one who by reason of vascular changes, or organic lesions elsewhere, is incapable of providing for himself those factors in vital resistance which are so essential in combating all infectious diseases.

Pathology and Treatment of Pneumonia.—(By John North, A. M., M. D., Ph. C., F. S. Sc. (London), Toledo, Ohio.)—If it were only possible to destroy all books and other pritings on pathological histology, pathology and treatment of diseases and to obliterate all knowledge of them from our minds, what a great blessing it would be to the modern pathologist and therapeutist. I would also include all past knowledge of physiology and to begin the study of these subjects according to our present knowledge of them. To be able to wipe out all the past theories and pseudo-scientific facts with which they are lumbered and only have to master that which is accepted as truth by our profession.

If we examine our best and latest text-books upon pathology, page after page is taken up with unimportant theories. Each work is only a revision of some old work written fifty or a hundrey years ago. Works on pathology devote most of their space to pathological histology. The true pathology that they contain could be written in a few pages. The term pathology is used instead of the proper term, pathological histology or pathological anatomy.

I know of no disease in which we have such a mass of antiquated ideas still retained, as we have in pneumonia.

By pneumonia, I refer to that disease produced by the pneumoccocci and not other diseases resembling it, in which we have an inflammatory process going on.

Pneumonia, pneumonitis, lobar pneumonia, croupous pneumonia, lung fever, and other names applied to true pneumonia, are usually defined as inflammation of the lungs.

I will give some of the old and modern definitions of pneumonia:

Wood.—The name of pneumonia is now usually applied to inflammation of the spongy tissue or parenchyma of the lungs.

Page.—Pneumonia or pneumonitis signifies inflammation.

Gould.—Inflammation of the lungs.

Ingals.—Lobar pneumonia consists of an inflammation of the vascular structure of the lungs with accumulation of inflammatory exudation in the air cells, whereby they are filled and rendered impervious to air.

Dalton.—Pneumonia is an acute inflammation of the lungs of infectious origin.

Anders.—An acute infectious disease caused by the *Micrococcus lanceolatus,* which produces a specific inflammation of the parenchyma of the lungs and marked constitutional disturbances.

Osler.—An infectious disease characterized by inflammation of the lungs, etc.

For the past thirty years I have taught, both in lectures and clinics, that pneumonia was not an inflammation of the lungs; exactly what it was, I did not know, but I did know that it was not a true inflammation. In 1888 I read a paper before the American Medical Association in which I said that pneumonia was not an inflammation of the lungs, but was a disease produced by some disturbance of the vasomoter system of the double blood supply of the lungs. At that time I had not accepted the germ theory of disease.

I found no explanation of my theory of the pathology of the disease, till after Dr. Andrew H. Smith, of New York, wrote the article upon Lobar Pneumonia in the sixteenth volume of the "Twentieth Century Practice of Medicine." This article made clear to my mind ideas and theories that I had taught for over thirty years.

Dr. Smith's definition is as follows: "Lobar Pneumonia is an acute disease in which a specific parasite invades the air cells of one or more pulmonary lobes, where it grows in a fibrinous medium exuded from the functional capillaries, and generates a toxin that infects the system at large. The local process causes consolidation of the affected area by filling the air cells with the effused material, which material is afterward removed, leaving the structure of the lung intact."

In regard to the double blood supply of the lungs, Dr. Smith says: "The lung differs from all other structures in having two separate circulations: the nutritive, supplied from the left side of the heart through the bronchial arteries, and the functional supply from the right side of the heart through the pulmonary artery. This double circulation underlies all the prenomena of pneumonia and must be recognized in any definition of the disease, as without it the disease itself could not exist."

I believe that our high death rate in pneumonia comes to a great extent from our antiphlogistic treatment of the disease. I do not deny that we may have inflammation of the lungs, but I hold that pneumonia is not an inflammation of the lungs. Again, I quote from Smith: "As to the relation of the specific organism to the disease as a whole, we may note:

"First: That no amount of traumatism inflicted upon the lung, be the methods ever so varied, produces pneumonia. We may cut, pierce, bruise, burn, or scald the lungs; we may introduce mechanical or chemical irritants into the air passages, and while we get inflammation as the result, we do not get pneumonia.

"Second: We may have pneumococci infection in several serous and synovial cavities at the same time, reculting in supuration in each, and not have pneumonia.

"Third: We may introduce the pneumococcus into any portion of the body, save the lungs, and even into the blood itself, and we do not get pneumonia.

"Fourth: But if we introduce active pneumococci into the parenchyma of the lung, we always get pneumonia as the result. Pneumococci are always found in the lungs in pneumonia, often in connection with other micrococci."

If we carefully study the pathological histology of a case of pneumonia, we do not find evidences of inflammation in the sense in which it is understood when

applied to inflammation as it occurs in other tissue.

In inflammation we have effusion and the passages of leucocytes from the capillaries of the *nutritive circulation* into surrounding tissue. In inflammation of the lungs we would find this infiltration into the parenchyma of the lungs coming from the *nutritive capillaries.* In pneumonia we find the effusion and passage of leucocytes into the air cells: open cavities, and from the capillaries of the *functional blood supply,* altogether differing from inflammation. There is no change in the parenchyma of the lung, and but little effect upon the epithelium, except that caused by pressure of the effused product from without. Inflammation affects the tissue itself, and causes an anatomical change in its elements. In pneumonia this is not the case.

Emmet says that "inflammation causes molecular death," but we do not find this the case in pneumonia. After a few days the air cells are emptied of the mass of exudate with which they were filled, and the cell walls are found practically in their normal condition, having suffered, at the most, only a little loss of epithlium, produced by pressure.

Again the crisis in pneumonia takes place, usually from the fifth to the eighth day, with a sudden fall of temperature and other symptoms, while the physical signs remain the same.

Could this take place if the process was inflammatory?

What is pneumonia, if not an inflammation?

In pneumonia we have a process of germ culture going on in the air cells, each cell acting as a culture tube. The pneumococci, finding lodgment in the air cells, irritate the lining membrane of the cell, and then the functional blood vessels throw out material into the cell, which acts as a culture medium in which the germs rapidly multiply. The nutritive system of blood vessels maintain the nutrition of the lung tissue, and prevent its injury. A healthy and a morbid circulation taking place in the same tissue at the same time.

It is a well-known laboratory fact, that any germ acting upon a culture medium, if the medium is limited, after a certain length of time, it cannot furnish material for the production of toxins and nourishment of the germ and it dies. This is exactly what takes place in the air cells. The germ irritates the capillaries of the functional blood supply. Material is thrown out in the air cell, pressing upon these blood vessels and preventing any more exudate. After from five to eight days, the germ has exhausted the supply of culture medium, and ceases to produce any more toxin, which by its absorption caused the chill, fever, and other symptoms. No more toxin being produced, the symptoms subside.

Treatment.—If pneumonia is not an inflammation of the lungs it should indicate a radical change in its treatment. A non-inflammatory disease should not be treated the same as an inflammatory one. The patient should be placed in bed in a large, well-lighted, and well-ventilated room. The temperature should be kept at about 65 degrees. Above all things, a patient with pneumonia should not be removed from a warm bed and a warm room and placed in an ambulance and taken to a hospital. I would much rather attempt to treat a patient with pneumonia in poor hygienic surroundings than take the risk of removal to the best conducted hospital. A case of pneumonia is certainly not benefited by removing it from a warm bed to a cold ambulance, and then the exposure incident to a long ride does not add to his chance of recovery.

The risk of removing such cases is attended with great danger. The importance of placing a patient with pneumonia in bed and keeping him there should never be overlooked.

F. K., a strong, vigorous young man, called at my office one morning. He had some premonitory symptoms of pneumonia: in the afternoon he had a chill with evidences of consolidation. I sent him home and placed him on treatment, with instructions to go to bed. I visited him twice the next day. He was progressing well. I instructed him not to get out of bed under any circumstances whatsoever. The next morning, the third day of the disease, I visited him and found him in rather a nervous condition, symptoms not so favorable as the night before. He said that he awoke about four o'clock and felt so well that he got up and went to the watercloset, and ran all over the house, went into his parents' room and sat on the bed, and talked for some time, till he felt chilly, then went back to bed. The house was cold and damp. I told him I did not like his condition and was afraid that he would be worse, having disobeyed my directions. He said he was all right and wanted to get up and dress. I instructed him to remain in bed. At 11 o'clock I was sent for and found he had been having a chill, high temperature, full bounding pulse, flushed face, great dyspnœa, and in a high state of nervous excitement. I considered him in a very critical condition, and called Dr. Collamore in consultation. We bled him freely, which afforded temporary relief of the dyspnœa, but it soon returned again. He continued to get worse and died a short time after midnight, the beginning of the fourth day of his sickness. One of us was with him until death took place. If he had followed instructions and remained in bed and kept warm, I have no doubt he would have recovered, as he was doing well up to that time.

The food should be light but nutritious. Milk is the best diet.

No medicine should be given in any disease unless we know just what we expect it to do. Do not give any remedy for pneumonia just because it has been recommended in the disease. Some remedies may be good for pneumonia, but very bad for men, women, and children afflicted with the disease, and then during the course of the disease, the local and constitutional conditions are undergoing a change. The remedy indicated today might be of injury to the patient tomorrow. Mix your remedies with brains.

The surgeon of today uses but few medicines, but he studies those few well and knows just what he can do with them. He has the latest and best instruments and appliances, and he knows just how to use them to get the best results.

How is it with the physician of today? He has his laboratory, his microscope, his hematometer, his reagents, and other instruments of precision. He can make out a beautiful diagnosis, but then he is at a loss to know what to do. The physician of today does not know as much about therapeutics and the action and the limit to remedies as did his predecessors of twenty-five to fifty years ago. When he has made out his diagnosis, he takes up a price list of tablets and proprietary medicines and runs down the list till he comes to the name of the disease he has diagnosed, and gives it to his patient. Nearly 50 per cent. of all prescriptions are for patent or proprietary medicines.

Physicians are becoming diagnosticians instead of therapeutists.

If I see my patient during the prodrome before the chill I place him in bed and give him a brisk mercurial

purge, followed by a saline. By this I empty out the alimentary canal and stimulate secretions. Full doses of quinine at this stage may abort the disease and prevent the chill. As we seldom see the patient until after the chill, we have to re sort to other means. If I see the case within a short time after the chill, I give one grain of opium, also giving a few small doses of calomel followed by a saline. Tincture of aconite, in drop doses, should be given every hour. After engorgement and exudation has taken place, I place the patient on quinine, two grains, ammonium chlorid, three to five grains, tincture aconite, one to two drops, and svapnia one-tenth grain, made into capsule and given every two hours, from the time of the chill until the crisis takes place, giving it day and night, arousing the patient from sleep if necessary. There is no stage of the disease, prior to the crisis, contraindicating the use of all these remedies. Other remedies are used as indicated.

Quinine is one of the best remedies I have used in pneumonia. In the beginning, full doses will sometimes abort the disease. As indicated, I afterward give it in two-grain doses every two hours, twenty-four grains every twenty-four hours.

In pneumonia the leucocytes increase from 9,000 in health to 10,000 or 12,000 in mild cases, to 30,000 or 50,000 in severe cases per cubic millimeter of blood. Quinin prevents the rapid production of leucocytes. It also prevents their amœboid movements, and retards their passage out of the vessels into the air cells.

In pneumonia we find an increase of fibrin in the blood, the limpidity of the blood with its alkalinity is diminished. The presence of ammonium chlorid in the blood increases its alkalinity, diminishes its viscosity, and prevents coagulation. Tincture of aconite, in one-drop doses every hour reduces the frequency, force, and tension of the pulse, flushes and moistens the skin, and increases the amount of urine with a corresponding increase of solids. After these are accomplished, aconite should be discontinued.

Bartholow says: "It is more especially serviceable before exudations have taken place, but it is not without utility at any stage."

Fothergill says: "Aconite dilates the arterioles and greatly increases the capacity of the vascular system, and in this way drains blood away from the engorged part; in fact, this drug 'bleeds the patient into his own vessels.'"

I prefer svapnia to other forms of opium given in one-tenth grain doses every two hours. In such doses it acts as a stimulant to the respiratory centers, does not arrest secretion, but acts as an expectorant, relieves the cough and makes expectoration easier. Large doses of opiates should never be given, except in the beginning of the case. Since the introduction of heroin, we have a remedy that is very efficient in the treatment of pneumonia. One-twelfth of a grain, in tablet form, will quiet the nervous system, produce sleep, lower the temperature and pulse rate, diminish and increase the force of respiration, and make the expectoration much easier.

Alcohol, strychnin, nitroglycerin, digitalis, verratrum, salicylates, creosote derivatives, saline injections, etc., are all useful in pneumonia, if used in the proper stage, or to combat complications as they arise. Time will not allow me to take up each one. Warm applications, cold packs, or cold sponging are called for in almost every case, depending upon conditions and circumstances.—*Dietetic and Hygiene*

ABSTRACTS.

The Aetiology of Broncho-Pneumonia.—(*N. Y. and Phila. Medical Journal.*)—Dr. Lewis A. Connor states that the name broncho-penumonia is given to a type of inflammation beginning in, and at first confined to, the walls of the smaller bronchi and that the involvement of the lung tissue proper is secondary and occurs chiefly by extension of the inflammation through the bronchial wall to the contiguous alvolar. The terms lobular and broncho-pneumonia are frequently used as synonymous and interchangeable, but it is clear that such lobular pneumonias as do not show this close relation to the bronchi are not instances of broncho-pneumonia (as, for example, those due to infection through the pulmonary artery). On the other hand, broncho-pneumonias are by no means always lobular in their distribution and extent of areas of consolidation. The name broncho-pneumonia, then, does not indicate a single infectious disease, but "describes a lesion rather than a disease."

Broncho-pneumonia may, with respect to its aetiology, be divided into two great classes—primary and secondary. The secondary cases include much the greater number, although the relative proportion of the two classes differ much at different ages. Thus, among 443 cases seen in children Holt found 37 present primary, whereas among 53 cases in adults examined by Netter, all but 8 per cent were secondary. Holt found that 97 per cent. of the cases of broncho-pneumonia occurred during the first three years of life. Out of 550 cases of primary pneumonia in adults only 8 were instances of broncho-pneumonia. In the aged the greatest number of cases develop in the course of the various chronic diseases common to that period of life. Like lobar pneumonia, cases are seen chiefly during the cold, wet months of winter and spring. Children suffering from malnutrition and those living in asylums are much more prone to the disease.

Secondary broncho-pneumonia may be divided into three groups.

1. Those cases complicating or following the acute infectious diseases, and seen especially in children.

2. Those developing in the course of various chronic and debilitating diseases.

3. Aspiration pneumonia. Under the first group we find that measles stands easily first; in hospitals and asylums complicating 40 to 50 per cent. of the cases, then influenza, diphtheria, whooping cough, scarlet fever, bronchitis of the larger tubes, etc. Broncho-pneumonia, as a complication of chronic and debilitating diseases is seen especially in old age. Aspiration pneumonia is common in all conditions of stupor and unconsciousness; it follows submersion, inhalation of irritating gases, as ether, illuminating gas, smoke.

The pneumococcus is found in nearly all primary cases, either as a pure culture or in conjunction with other germs, especially the streptococcus. In secondary pneumonias while the pneumococcus is the most frequent organism mixed infections are the rule and in many cases it is difficult to assign to any particular organism the dominant role as pathogenic agent.

Clinical Types of Pneumonia, With Special Reference to Aberrant Forms.—(By R. Murray Leslie, in *Nat. Clinics.*)—Without going into minute bac-

teriology of pneumonia, the author emphasizes the fact that pneumonia is due to the pneumococcus discovered in saliva in 1880, by Sternberg, and rediscovered by Fraenkel in 1884. In typical cases it is the sole organism, and is rarely absent from any case of lobar pneumonia; it is often associated with other bacteria, especially those of influenza, septicaemia, diphtheria, plague and enteric fever. Dr. Washburn, of the Royal College, London, found that culture strains from lobar pneumonia would produce, by inoculation, fibrinous inflammation, while that from broncho-pneumonia would produce cellular inflammatory products. The author states there is a marked difference in the vitality of pneumococci, most of them dying when temperature is below that of the body, while others are active at 20 degrees C. This latter form is the least virulent. There is likely a pneumococci toxin, but it is so unstable that it has not been isolated. Pneumococci are found in the mouths of 20 to 30 per cent. (Washburn and Sternberg) of healthy individuals; when the vitality is sufficiently low the organisms take hold, hence the importance of antiseptic mouth washes as a preventive measure. The pneumococcus may pass through the lungs, leave no inflammation in lungs and set up in other parts pleurisy, empyema, pericarditis, endocarditis, meningitis and otitis media. The various types of pneumonia may in the future be shown to be due to the varying virulence of the coccus. Since the appearance of influenza the death rate from pneumonia has risen decidedly and is due to the depressant effect of the influenza bacillus, thereby lowering power of resistance and allowing entrance of the pneumococcus.

As to aberrant, or typical forms, the author speaks (1) of those cases which do not show initial chill and sudden onset, but there is gradual rise of temperature, etc. Most of these are influenzal pneumonias, but not all of them. Under this heading the author remarks that the initial symptom in children is much oftener a convulsion than a chill; two important diagnostic points are, first, the pulse-respiration ratio is changed from 4 to 1 to 3 to 1; and secondly, the leucocytosis rises from 9,000 to 12,000 to 40,000 in pneumonia, which is not the case in typhoid fever and influenza; the absence of leucocytosis in pneumonia is a very unfavorable prognostic sign. (It would be interesting to know if this leucocytosis occurs in influenzal pneumonia—abstractor.) Mortality in cases showing labial herpes is 7 per cent., while in those not showing herpes is 25 per cent. The author urges the careful examination of the apex for pneumonia; special cases are often overlooked because it does not move clothing entirely and so do not get at apex region. Central pneumonia is often overlooked because they do not show physical signs on auscultation and percussion, but the high temperature and sudden crisis are present. Apical pneumonia is more fatal in adults than children; in alcoholic subjects all forms give high mortality. Second aberrant form mentioned is the abortive form in which the onset symptoms are typical, but which subside in a few days; this is often the case with influenzal form. Thirdly, there is a latent form in the aged which may not be recognized until after death. Fourthly, is mentioned the migratory form in which when one portion of lungs clears up a second becomes involved, with rise of temperature, etc. These cases, the author thinks, are cases of broncho-pneumonia complicated by streptococcic infection. Fiftly, is the form of delayed resolution—which cases may run ten or eleven weeks and recover; often there is some old

standing valvular lesion to account for the delay.

Sixth, there is massive type, which is rare, but well marked, in which the bronchi and alveolar sapces are filled with fibrinous exudate; ;this form is often mistaken for pleuritic effusion and is often fatal. . . . Speaking of complications, the author thinks any complication is of serious import and that mortality is four times greater in complicated cases.

There is more or less pleurisy in almost every case and it is only those cases which furnish decided effusion that are of serious consequence. Effusion is serous or fibrinous and shows great tendency to become purulent. Small effusion, if the lower lobe is consolidated, may be forced upward and press against the heart, owing to inability of the consolidated lung to collapse. Empyema in children is usually of favorable prognosis and fluid may absorb without interference of any kind; delayed crisis, or decided rise in temperature at this time, often speaks for empyema. Pericarditis is a grave complication and is fatal in 50 per cent. of cases, is frequently overlooked, especially in left-sided pneumonia in which you often get a pleuritic friction sound over the area of the heart. Dr. Kingston Fowler thinks those cases which prefer to be propped up instead of lying down should always make one suspect periocarditis. Again the area of pneumonia dullness may cover area of pericardial effusion and cause one to overlook it; pericaritis occurs in 3 to 5 per cent. of cases of pneumonia and is most frequent in the left sided form abscess of lung; meningitis and acute endo-carditis are very serious complications; in the menigitis the cocci are often found in meningitic exudate. The writer thinks that it is rare that phthisis follows pneumonia, although admitting that it does sometimes occur. He thinks pulmonary tuberculosis more commonly follows catarrhal than lobar pneumonia. There is a form of pneumonia phthisis or tuberculous pneumonia in which an entire lobe may become rapidly consolidated in a few weeks. The author thinks that fibrosis of the lung (chronic interstitial pneumonia) rarely follows pneumonia, although the thickened pleura left after pneumonia may favor its development. Author cites a case of cardiac thrombosis occurring in a young lady.

Lobar and Broncho-Pneumonia in Infants and Children.—(*Medical Record, Dec.* 19.)—A symposium was held on these diseases at the New York Academy of Medicine. Dr. Bovaird, Jr., stated that the pathology of lobar pneumonia in children and infants presented no striking differences from that of later life; that it was more common in children than in adults to see a practical consolidation of one lobe, or a distinctly lobular type. The most important associated lesions were found in the pericardium, the meninges, and peritoneum, due to a general infection with the pneumococcus.

Bronco-pneumonia was met with in 40 per cent of all the autopsies performed at the New York Foundling Hospital. In general three distinct types were recognized—types which represented stages in the development of the process. The process in each stage was regularly bilateral, and, for the most part, symmetrical. The first stage is the stage of congestion, next scattered areas of consolidation; third is the pseudo-lobar pneumonic. He had been impressed with the frequency with which empyena was associated with broncho-pneumonia. The pneumococcus is found in 95 per cent of all the cases of lobar and 50 per cent. of cases

of broncho-pneumonia. The disease should be regarded as a general infection with a local lesion.

Dr. Northrup stated that the onset of pneumonia was about, that in a few hours the physician would notice signs of toxaemia, the child would be drowsy, chilly, and irritable at first, but in a short time would be flushed and feverish with a pulse of 140 and respirations one-third as fast; that when the pulse-respiration ratio departed from the normal, one to four, and approximated one to three, one should always look for a lesion in the lungs. In nearly all cases seen, outside of a hospital, the nurse did not think it worth while to take a baby's respirations. Soon there would be diminished respiratory murmur over the affected lung, harsh breathing, bronchial voice and breathing, and the bronchial whiff. The primary pneumonias were nearly all due to the pnemococcus. It was not uncommon for the neck to be rather stiff or to have diarrhœa with the discharge of mucous stools, that the most common mistakes were in confounding meningitis and diarrhœa with prostratum with pneumonia.

Dr. Winters stated that a child suffering with pneumonia, in private practice, should be wrapped in flannel and should be placed in a warm room. If it were restless it should be soothed by small doses of Dover's powder (original formulae by Dr. Dowie, i. e., opium, ipecac and sulphate of potassium). Aconite was strongly indicated in the early stages; also full doses of nitre, i. e., 20 drops every hour for an infant of one year. Alcohol should be avoided in the early stages and should be used with caution in the later stages. Oxygen was of value in bad cases and would often save children who would die if only given alcohol and strychnine. Great care must be taken to keep stomach and bowels in proper condition. Milk should not be offered until the child's throat was

Dr. Kerley stated that in his hands child's thirst was satisfied.
most satisfactory means of reducing temperature; that Dr. Winters had objected to the cold pack because it made the child restless, but he had found that it had the opposite effect, i. e., made the child quiet.

The Treatment of Pneumonia.—(By David W. Finlay, Prof. Medicine University of Aberdeen.)—Prof. Finlay thinks there has been a complete renovation in the treatment of pneumonia within the past thirty years, during which period the employment of bloodletting, tartar emetic and less of opium and calomel, along with hot poltices and fomentations have been displaced. For purposes of comparison, he mentions the following as indications for bleeding as taught by the ablest physicians of sixth decade of the last century; this remedy is of great power in the early stages of acute inflammation (1) when constitution is unimpaired; (2) when disease is attended by inflammatory fever or symptoms threatening, but not with exhaustion, yet in which onset of disease was very rapid. The bleeding as was taught there is best done in the first 24 hours and must be done freely. An aggrevation of symptoms would indicate a second bleeding, but as a rule the first was sufficient and alleviated the symptoms. The physicians of this time insisted on the use of tartar emetic in all non-debilitated cases, a liberal dose in these cases being one grain every hour; if vomiting occurred from first dose it was no indication to stop the drug as this vomiting really did good; but if vomitng continued or patient became covered with perspiration or much prostrated the dose was to be

lessened one-half and continued until the crisis after which good nourishment alone was needed. The use of poultices was liberal, but the routine use of opium was condemned and alcoholic stimulants were allowed along with the antimony. The older physicians held very tenaciously to the antiphlogistic idea what is now practically obsolete and the reaction has perhaps carried us too far in the opposite direction. According to the modern idea, nothing will cure pneumonia which is spontaneously curable in many cases and the physician has but to act as the skillful pilot, recognizing the key to the position lies in the capability of the heart to do its works while seriously handicapped; we must know the evil effects of very high temperature, but at the same time remember that cases may die which have no very high temperature. We must not depress the patient and to this end must rely on strichnine, ammonia, ether and quinine. Even with high temperature antipyretics are harmful because they depress and we find better and non-depressing measures in the application of cold to the surface in form of ice bag, cold wet pack, or in extreme case, the cold bath. The author is not in favor of the use of digitalis, which is so popular with many practitioners and assign as his reason for this opinion the conclusions reached after experimental study by Lander Brunton and Prof. Cost, of Aberdeen University on the "alterations in the action of digitalis produced by ferile temperature." This investigation showed that a "high temperature lessened the inhibitory power of the vagus centre in the medulla to such an extent that digitalis, which acts on this center, loses its power to a great extent, to restrain the action of the heart and slow the pulse, as it would at the normal temperature and that at a very high temperature might have no effect at all. It is therefore evident that if digitalis is given at all when the temperature is high, should be given with great care, for otherwise the medical man may be induced by the apparent inaction of the remedy, to push its administration too far during the fever, with the consequence of producing too great depression of the pulse during defervescence."

For the stitch like pleuritic pain the author strongly endorses the application of two or three leeches, which may be followed by hot or cold applications. He condemns the use of opium on account of its tendency to produce cyanosis and cannot remember having prescribed it since he began treating penmonia on his own responsibility. He is shy of using this drug in any lung trouble except hemoptysis where it is good. With a temperature of 103 degrees of over the author favors hydrotherapy and cites the case of a carter, aged 28, alcoholic, who was sick four days with cough, pain in right side, vomiting, restless, delirious, respirations 44, pulse 120, temperature 101.2 degrees, bloody sputum; at 8 p. m. temperature was 104 degrees, respiration 58, pulse 140 and very delirious; outlined wet pack and in hour respiration was 42 and pulse 92. From this point temperature gradually lowered and soon got well, was dismissed, later began drinking again, contracted pneumonia in left base, temperature rose to 104 degrees and died, although cold applications were used. Some claim that the ice bag checked inflammatory process; the author thinks it acts only as a local refrigerant and this way is useful. He has had no experience with saline injections, but thinks the fact that they are recommended by Johns Hopkins Hospital a point favorable to their employment. Inhalation of oxygen theoretically ought to do good;

practically has given little result. For insomnia cold or tepid sponging is safest.

The author summarizes chief points in treatment this:

1. No routine drug treatment is of any value.

2. Avoid all antipyretic drugs and depressing lines of treatment.

3. All nauseating drugs, digitalis included, tend to favor heart failure by impairment of appetite.

4. Supporting line of treatment, in widest sense, will give best results.

5. For pleuntic plain leeching is best.

6. For high temperature, especially with delirium, use cold applications.

7. In vigorous subjects with cyanosis and engorgement of right heart, general blood-letting may be practiced.

8. Alcohol should not be employed in routine way. Use when indicated by pulse and temperature.

—*Internation Clinics.*

Membranous Stornatitis—Complicating Pneumonia; Eight Cases Reported. —(The *Medical Times,* Dec., 1903.)—J. M. Frazier reports eight cases of membranous stornatitis, complicating lobar pneumonia. The cases extended over a period of three years, 1900 to 1902; the patients were all young women, residents of a female boarding school in Bolton, Texas. They were all typical cases of pneumonia, being ushered in with a chill, having marked physical signs and a distinct crisis on the seventh or eighth day, the temperature ranging between 103 and 106 degrees. The membrane when first seen was on the arch of the palate, extending by patches to the anula, cheeks, tongue, roof of the mouth, and under the tongue—the pharynx being free. The membrane as first observed on the third day was thin, grayish white in color, and when removed left a raw bleeding surface. It gradually thickened and evfoliated in from five to eight days. The bacteriological findings were a pseudo diphthretic bacillus and a diploccus of unknown variety.

Epidemic Influenza.—Hunter (*Medicine*) is prompted to write a historical sketch of la grippe by three considerations: (1) The seven epidemics of the last few years; (2) that most modern authors speak of the disorder as but recently discovered; (3) that it is treated as if older writers knew nothing of its history or pathology; its etiological factors were misunderstood and its symptomotology misinterpreted; its significance as a forerunner of other and more serious affections ignored, and known methods of therepeutics misapplied. Modern authors have added nothing of intinsic value to the literature and knowledge of the subject except the discovery and isolation of micro-organisms supposed to be the cause of the disease, and to suggest a more rational line of treatment in consequence.

The disease was known to and mentioned by Hippocrates. The first accurate record of an epidemic was of one that occurred in 1323. From then until 1510, twelve outbreaks are mentioned, but of them but little is known. Since then nearly twenty general epidemics have been noted and accurately recorded, many prominent characteristics of individual outbreaks being given by the author. The epidemic of 1510 raged all over Europe, scarcely an individual escaping, but few dying except children. The one of 1557 was preceded by a hot, dry summer, followed by cold northerly winds. It covered Asia and Europe, afterwards visited America. The fever was a double tertian and was very destructive, as was the one of 1580, in which nine thousand persons died at

Rome. This visitation was noted in France for a prodigious number of insects that covered the roads about the time of its appearance; animals took a dislike to their pastures; birds of passage migrated before their usual time and those that slept in low valleys repaired at night to higher districts. Vigilance or somnolency, giddiness, resembling that of intoxication and swelling of the paratoid glands were characteristic symptoms of this visitation; 1590-91 saw a similar epidemic of noted cerebral symptoms in which Rome witnessed ninety thousand deaths. In 1663 sixty thousand persons were attacked with influenza in one week in the Venetician states. The epidemic of 1732 spread over Britain and North America, and as far south as Peru. It was noted for affecting the intestinal system. In 1743 it prevailed in Europe under the name of *la grippe*, a word probably derived from *chrypka*, the Polish word for hoarseness. In 1872 it raged in Germany under the term *bletzkarr*, from the suddenness of the invasion.

The symptoms and complications given in these various epidemics do not differ materially from the manifestations of the disease as we see it now.

The principal varieties of the disorder as given by the older writers are as follows:

1. Cerebral, characterized by vertigo, delirium, erysipellatous eruption on the face, sometimes swelling of the parotial glands.

2. Gutteral, attended with cynanche tonsillaris.

3. Bronchial, with difficult oppossed respiration.

4. Intestinal, with diarrhœa, mucus evacuations, and in some examples tenderness of the abdomen.

5. Typhoid. This form which rarely occurs except among the poor and badly nourished is characterized by depression of pulse, extreme prostration of strength and other symptoms of putrid or adynamic fever.

Broncho-Pneumonia in Children.—Dix (*Medical Herald*) divdes the treatment into pophylactic and remedial. Most of these troubles are secondary to colds or simple bronchitis, and prompt treatment in robust subjects prevents pneumonia. The sleeping room should be kept at a temperature of 65 to 70 degrees F.—clothing adequate to protect from cold—woolen next to skin, and avoid being out in wet, stormy weather. For bronchitis, a cough mixture is suggested to be kept on hand consisting of spirits niter, syrup ipecac, papine and syrup tolu. This will relieve most colds of children. If pneumonia supervenes, it is to be treated with cotton batting to chest so applied as to allow easy application of counter irritants (a difficult task in our experience—Editor); soap liniment is advised as a counter-irritant. Quinine during prevalence of fever, increased for high temperature. Bromide potash should be given with quinine to counteract tendency to cerebral congestion. The above mentioned cough syrup is given throughout the disease—the papine being increased if much pain is present.

Anti-Pneumonic Serum in Infantile Pneumonia.—The *Therepeutic Gazette* summarizes a report of eight cases by Morse)Archives of Pediatrics) thus: In these cases the antipneumonic serum had no effect upon the duration of the disease, the course of the temperature, the rate of the pulse and respiration or the progress of local conditions. Complications occurred in an unusually large percentage. The serum, while it apparently did no good, certainly did no harm.

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VOL. L. CHARLOTTE, N. C., JANUARY, 1904. No. 1

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EDITORIAL.

A NEW DEPARTURE.

With this issue of the JOURNAL we begin the custom of devoting the contents of about every other issue largely to the consideration of a special disease in its season, or to a group of troubles incident to some special organ. This number is devoted largely to pneumonia and kindred troubles.

The importance of a knowledge of the acute troubles connected with the air passages cannot be too greatly accentuated. Their greater prevalence at this season of the year, the large death rate attending them and the number and severity of the sequelae make new ideas in their treatment and the refreshing of the memory on points connected with their management very acceptable, and we trust our efforts in this direction will prove beneficial to our readers and their patients.

A systematic study of these troubles in connection with the influence exerted by the weather, winds, humidity, temperature, etc., as a secondary cause of bronchial and lung disease would be both interesting and profitable. Epidemics of pneumonia occasionally occur, and notes and observations of the attending phenomea of any such condition in a community would add to the sum total of our knowledge of this disease. Pneumonia being an acknowledged germ disease, self-limited and running a definite course, the germ (*diplococcus pneumoniae*) is always present. Its presence has also been demonstrated in large numbers of persons seemingly in perfect health, and an extended study of the etiological factors that excite the dormant germ found in the system and bring into active play, is needed.

As much as has been written of influenza (*la grippe*) in late years, the subject is by no means exhausted. This is especially true of the special microorganism that produces the disease, and also of its extended sequelae.

These remarks are offered in the hope that some of our readers will, during the present winter, record their observations and give the JOURNAL the results of their studies.

OSTEOPATHY IN THE SUPREME COURT.

The medical profession had every reason to believe that the recent amendment to the medical practice act passed by the last Legislature would prevent osteopaths practicing medicine, but it seems otherwise. We have not seen the full text of the decision, but learn from the lay press that in the case of one "Dr." Biggs, indicted for practicing medicine without a license, the Supreme Court has decided that the law is unconstitutional, and that Biggs may practice a system of drugless medicine without obtaining a license of the State Board of Medical Examiners.

This decision is of grave importance to the medical profession and of more than ordinary interest to the general public. Under its protection every old "bone setter" in the land, regardless of his qualifications, is allowed to treat disease of any and every form, so he calls himself an osteopath or does not claim to be a regular doctor. This is of much more importance to the public than it is to the medical profession. For over a half century the regular profession of North Carolina has tried to protect the public against the quack, charlatan and ignorant pretender in the practice of medicine, and all the laws emanating from the State Society, or enacted under its influence, have been more for the benefit of the public than for the profession, and the effort to rid the State of this class represented by Biggs is in this line. The failure of the amendment to do so is to be regretted.

Below we append a few clippings from the lay press:

"The opinion of the Supreme Court in the case of Andrew C. Biggs, who won his fight in the matter of practicing a system of drugless healing, osteopathy, without a license from the State Board of Medical Examiners, is making quite a stir among the regular physicians in the State, who thought the legislative act, enacted this year, would certainly stand. Judge Clark, who delivered the opinion for the court, uses strong language therein and intimates that the orthodox practice of medicine is a monopoly."—*Raleigh Letter to Wilmington Messenger.*

"The decision in the Biggs case, which was one of far-reaching importance to the public as well as to the medical profession, was generally received here with approval. Not only the public, but the doctors themselves, almost without exception, say it is right. Biggs has been practicing healing the sick, without drugs or surgery, and was indicted for violating the new medical law, which required everybody except Christian Scientists and trained nurses to get a license after having been examined before the State Medical Board of Examiners. Every osteopath in the State, it is said, slipped up before the board and had to leave the State. Biggs always claimed that he was an osteopath, but used a method taught by his own school. He had paid his regular license tax when he first came to Greensboro, and has never ceased practice, although having several indictments hanging over him. Major Chas. M. Stedman advised him from the first that the new medical law was unconstitutional, because it created a monopoly of practice of one school of medicine, except Christian Scientists. Later he associated E. J. Justice in the case and their position has been upheld by the Supreme Court. Biggs has done and is doing a very large practice here by massage and physical culture and his patients get great benefit, largely from the chronic incurable classes. All seem to derive great benefit."—*Greens-*

boro Correspondent News and Observer.

In answer to the above, we most cordially commend the following reply from the physicians of Greensboro, and fully endorse the position they take:

"To the Editor: Your Greensboro correspondent in today's *Observer,* who seems to be an ardent admirer and warm supporter of 'Dr.' Biggs, makes the following statement:

" 'The decision in the Biggs' case, which was of far-reaching importance to the public, as well as to the medical profession, was generally received here with approval, not only the public, but the doctors themselves, almost without exception, say it is right.'

"We the members of the Greensboro Academy of Medicine, would like to ask where your correspondent got his information? If he wanted to know the real sentiment of the physicians of this community, he could easily have obtained the same.

"No member of the Greensboro Academy of Medicine, which includes all the white physicians in the city, approves the decision. Most emphatically we do not endorse any law that tolerates a system as practiced by this man Biggs. On the contrary, we stand as a unit in our hearty endorsement of Dr. Battle's efforts to rid our beloved State and people of this fellow and his methods. We do not believe that there is a self-respecting physician in North Carolina who does endorse Mr. Biggs, or approves his so-called system of practice.

"J. P. Turner, M. D., W. P. Beall, M. D., J. W. Long, M. D., A. F. Fortune, M. D., C. L. Scott, M. D., W. J. Richardson, M. D., Z. T. Brooks, M. D., A. A. Ledbetter, M. D., Edmund Harrison, M. D., Thos. R. Little, M. D., Jno. E. Logan, M. D., E. L. Stamey, M. D., A. L. Petree, M. D., J. T. Battle, M. D., Joy Harris, M. D., J. G. Broadnax, M. D., Charles Roberson, M. D., E. R. Michaux, M. D., Albert R. Wilson, M. D., W. J. Meadows, M. D., Jas. E. Brooks, M. D., J. E. Grimsley, M. D., C. W. Banner, M. D."—*News and Observer.*

SHALL COUNTY MEDICAL SOCIETIES ADOPT A DELINQUENT LIST?

The formation of county medical societies in the plan of organizing the profession as now proposed, and under active process of consummation, will bring up the idea of using these bodies as a means of forcing the collection of accounts for services rendered against a large class of delinquents who persistently disregard their obligations in this respect. Right here the question arises as to how far we can use the organization for this purpose without detriment to the best interests of the profession.

The purposes of the county society are definitely set forth in Article II of the constitution recommended by the committee of the American Medical Association, and it is presumed that this or a similar clause is adopted by county societies generally. They are, "to bring into one organization the physicians of the county;" "so that by full and frank interchange of views they may secure such intelligent unity and harmony in every phase of their labor as will elevate and make effective the opinions of the profession in all scientific, legislative, public health, material and social affairs, to the end that the profession may receive that respect and support within its own ranks and from the community to which its honorable history and great achievements entitle it; and with other county societies to form the Medical Society of the State of

————, and through it, with other State associations, to form and maintain the American Medical Association."

The primary object, then, of the society is the elevation of the profession and the whole tenor of the constitution as recommended by the committee is to accomplish this purpose through and by a system of affiliation and mutual help and encouragement, within the ranks of the profession. In close relation with this—in fact a part of it—is the purpose to make effective the opinions of the profession in certain lines, and thereby command the respect and support of its members and the public.

That the profession at large has not received either the moral or pecuniary support it deserves at the hands of the public is uncontroverted. This is a loss to the public for, with adequate moral backing, and the necessary financial relief much in the way of progress, not only in medicine but in all material affairs of life, would be added to the work already accomplished under adverse conditions. To secure this support by united and harmonious efforts in the uplifting of the profession, partially for our own benefit and largely for the public's good, is the goal of our labors. In securing it, it behooves us to look well to the means used lest we lose the respect due us as a profession.

The *Medical Times* sounds a note of warning in an editorial upon a kindred subject—a comparison of medical societies unto labor unions—claiming that there is a general, though superficial belief in the close analogy of medical societies to labor unions, resulting in placing the physician in the class of laborers in contra-distinction of a profession, and is inimical to our interests as well as to the public. A principle of the labor union is a uniform wage scale, and with this, the fee bill of the medical society is likened. The tendency of the labor union is to pecuniary and social benefits, while scientific interests are the motives of the medical society. The *Times* thinks the medical profession has inadvertently allowed itself to be placed apparently in two close analogy to the labor unions.

The JOURNAL stands for the recognition of the principle that medicine is a profession and must not be classed with mercantile pursuits or traders, and would deplore any action that would place it upon such a level. The points made by the *Times* are well taken, and are the ideas generally of those who would command the respect of the public, and pecuniary support through the dignity of the profession alone.

Per contra, and without inconsistency in the position taken, there is a business side attached to a profession. It needs no argument to show that the doctor should be paid for his services. Even if one were able or willing to live without an income from his practice, it is questionable if such a course would be justifiable, in consideration of the large majority of physicians who depend upon their labors for a support. A practice in the larger cities may give ample returns for services rendered, but in the smaller towns and country districts the medical profession is poorly compensated. Whether this arises from a want of proper support of the dignity of the profession, incompetency on the part of its members, failure to command the respect of the public, or disregard of pecuniary obligations, we will not stop to discuss. The fact that the physician is not paid remains with us, and especially is this so in the country districts.

The avowed purpose of the delinquent list, so far as we have seen or

heard it discussed, is to reach a certain class of individuals who employ one doctor as long as he will give his professional services without insisting upon payment of fees. When the fees are demanded, his medical attendant is changed. As settlements are usually only once a year, and several different physicians can be reached, these parties avoid the payment of their bills for several years, though amply able to do so. For one physician to refuse his services only results in the loss of the account already made with no redress. This class is a large one, and can be found in most communities. To reach it and force collections, some concert of action is necessary. How this is to be accomplished and at the same time preserve the dignity of the profession, is a burning question.

Chapter II, Section 3, of the By-Laws recommended for the county societies by the committee of the American Medical Association, reads thus: "In all proper ways the public should be taught that business methods and prompt collections are essential to the equipment of the modern physician and surgeon, and that it suffers even more than the profession when this is not recognized." It is readily grantel that any system of education that will teach the public these facts is better than plans to force collections. That class of patient under discussion is not easily taught. As a class it is devoid of respect for the profession and its attainments, and cannot be reached by moral suasion or appeals to a sense of duty and obligations. Stern discipline is as essential for correction as it is for the unruly school boy. How to apply this discipline so as to meet the indications, and at the same time retain the respect and confidence, as a profession, of the better and more enlightened portion of the public is the question for our consideration.

To bring into prominence the business aspect of the profession ought to be good policy and command the respect of business men, but does it? The general tenor of the the expression of opinion today is that of accentuating the business side of the profession; and the physician is being classed with the artisan. Whether as a result of being thus classed, or from some other cause, his influence with the public is on the wane.

The professions have ever been hedged about with a degree of distinction not given to others. The fact of being a member of one of the professions carries with it honor and repute. To a certain extent they are a separate and distinct class. Homage and respect are given them. This is a concession won by generations of the past and freely granted by the public as a mark of distinction for the work of professional character to society and the world's progress. Its possession has enabled the professions to wield an influence for good that would have been impossible but for the confidence given them. The distinctive idea has always been, and should still be, that professional pursuits were superior to secular matters. It is this that has given them a prestige, and furnished a leverage of grand proportions that has been used for good in times past. In all these the medical profession has shared equally with the others, both in the respect given and the good accomplished.

How much we valued this position in life will be shown by the care with which we guard it. Our predecessors in the work earned it by strict polity of mind, integrity of character and fidelity to every trust. It is only by like conduct that we can hope to retain the place now held in the estimation of the public. It can be forfeited in a moment by announcing that the practice of medicine

is no longer a profession, but of the class of laborers, and to be conducted on the business principles of this class. The establishing of rules and regulations for the collection of accounts due members of the various county medical societies will be a long step in this direction.

We have tried to present both sides of the question in a concise form as fully as the limits of an article of this character will admit. We would prefer leaving the question here without expressing an opinion as to the best course to pursue in the matter, but duty compels us to say that we believe the position we hold with the public, and the prestige already gained, is of more advantage to us than the collections of unpaid accounts.

CAROLINA MEDICAL JOURNAL.

We extend to all our friends, old and new, New Year's greeting, and express the hope that 1904 will prove a happy year to you. With this issue you will notice a considerable increase in the size of THE CAROLINA MEDICAL JOURNAL, and we desire to call attention to the fact that we have undertaken to devote every other issue to the consideration of some seasonable medical topic. This issue is devoted largely to pneumonia and kindred affections. In May we expect to devote the JOURNAL to acute disturbances of the digestive tract, and so on through the year. We hope to make the JOURNAL more useful by this means, but, doctors, we need *your* active help to succeed.

We want and need short, practical papers from Carolina doctors. You are modest; you fear you cannot write as well as some others—but, men and brethren, don't you know that Carolina physicians are as good as any? You need take no second place—you can write and instruct regarding the treatment of disease in the South far better than men living in other sections. Our pages are open to you, and through the CAROLINA MEDICAL JOURNAL you can reach most of the Carolina practitioners and thousands of others in the South. We are now giving you a journal that contains twice the matter it did four years ago. Paper is higher, the printer must be paid more (his living costs him more) and we are compelled to increase our subscription price.

Beginning with this issue, we must increase our rate to $2.00 per year, or $1.50 if paid strictly in advance.

Wishing you continued prosperity.

PUBLISHERS CAROLINA MEDICAL JOURNAL.

P. S.—If the brethren who are in arrears would "ante-up," a considerable load would be removed from the shoulders of the Business Manager.

HISTORY OF SURGERY IN NORTH CAROLINA.

Dr. H. A. Royster, of Raleigh, will soon begin the preparation of a history of surgery in North Carolina. Of course this history will be largely a biography of those who have done the surgery in North Carolina, and Dr. Royster will have to depend on the old files of our JOURNAL, papers published elsewhere, and also upon the testimony of the older physicians, and reports of friends and papers left in the hands of certain families. The doctor will be grateful for any material or suggestions. He deserves well at our hands, men and brethren. Rally every one to his aid.

Mr. Herbert Spencer, probably the greatest thinker of the Victorian age, died recently at the advanced age of eighty-four.

Selections From Our Exchanges.

A New Study of the Physical Signs of Lobar Pneumonia. — While it is generally believed that the physical signs of lobar pneumonia are perfectly understood and have received full elucidation, it is by no means certain that additional signs may not be discovered in the future, and therefore a renewed study of the physical signs on patients suffering with the disease may lead to some new or, at least, strengthen the establishment of the old physical signs and more clearly define their limitatons.

Such a study has been published by Connor and Dodge (*Am. Jour. Med. Sciences,,* September, 1903) and a perusal of this article is worth while. They are convinced that the finer shades of breathing can be more readily distinguished by the ear applied directly to the chest than through the intervention of the stethoscope; in this we must emphatically coincide. There is no instrument which gives the sound louder, at least there is no stethoscope that can make the sounds as clear as the ear applied to the chest unaided can make them.

The authors call attention to two possible sources of error which should always be borne in mind.

1. "In the case of forced breathing through the mouth a distinctly tubular quality is frequently given to the breath sounds, and especially to the expiratory sound, as heard through the chest. These sounds are occasionally so loud and distinct as to almost mask the vesicular murmur. This difficulty can usually be overcome, of course, by having the patient breathe through the nose."

2. "In examining the back of the patient who is lying on his side the lower side of the chest, because of its compression, or, perhaps, because of its contact with the mattress, will give, almost always, a percussion note noticeably deeper and more resonant than that of the upper side."

This contrast may be very distinct and give the impression that the upper side is abnormally dull on percussion.

In regard to the character of the breath sounds in the early stage of pneumonia, the authors examine the opinions held by various writers, and find that some writers recognize no significant change in the breathing, some find the breath sounds very harsh, or broncho-vesicular. This enfeeblement of the breathing appears very early and is associated with slight impairment of resonance on percussion. In a few cases an enfeeblement of the respiratory murmur was observed some hours before any change in percussion was demonstrable.

After discussing the cause of this diminished breathing, the authors discuss the rales in the first stage. In 85 per cent. of the cases a crepitant rale was heard, in a small number of cases the rale was called subcrepitant or friction sounds.

In the study of the bronchial breathing they found the second stage, as evidenced by bronchial breathing, commenced any where from the first to the eleventh day.

For a further study we must refer to the original article.—*St. Louis Courier of Medicine.*

Prognosis of Croupous Pneumonia.— (By J. R. Numbers, Weiser, Idaho.)—

In order that this division of our symposium may be properly introduced for discussion, I will without claim of originality, endeavor to present a brief re-

capitulation of the most important of the many factors which should be carefully considered by the physician before rendering a prognosis of any given case of this, the most fatal of all acute infectious diseases

With the aid of statistics we arrive at certain general conclusions, *i. e.*, that the mortality is higher in Southern than in Northern climates; that pneumonia is more fatal to the colored race than the white; that while occurring most frequently in the male sex, it is more fatal to the female, and also that in crowded cities the death rate is much greater than in the country, etc., etc. Statistics also forcibly bring to mind the interesting, though disappointing, fact, that with all the advances made in the knowledge of diseases and their treatment in the two past decades, the mortality of this dread disease remains practically unchanged.

Following the very general conclusions above mentioned, there are factors or conditions peculiar to the individual case under consideration, as of age, habits of life, history of predisposing diseases, present complications, area of lung tissue involved, environment of patient, virulence of the infection and certain special symptoms which to the close observer may be most significant.

Some of the above mentioned feaures may be considered more fully and I will recall that they may be thought of the general discussion.

Age is undoubtedly the most important consideration

While we have all seen what are apparently the most violent attacks of pneumonia in the young and physically perfect, even though a considerable area of lung tissue be involved, if surroundings are favorable and the treatment not too heroic, the prospect for this patient is good, for with strong heart and healthy kidneys to resist the influence of, and hasten elimination of accumulating toxins, the greatest source of danger is reduced to a minimum. While in the aged, with the visceral degeneration incident to advancing years, a very different picture presents. Though the objective signs and symptoms may be less violent or alarming, to the casual observer, with the low temperature and less pain complained of, yet the feeble, soft and flabby or rapid dicrotic pulse warns us of a flagging heart almost from the onset

With theadvent of coma or low muttering delirium we realize that the disease, so aptly spoken of as the friend of the aged," will soon bring to a comparatively painless end a life which is perhaps no longer useful.

Likewise, in the habitual toper, with the usual degenerative changes having taken place in the kidneys, heart, liver and nerve centres, we may expect a corresponding toxemia and a mortality of 70 to 80 per cent.

All history of past or present diseases which exhaust vitality, weaken resistance or cause degenerative organic changes, as Bright's disease, diabetes, tuberculosis, endocarditis, or pericarditis, or rheumatic or other origin, presages a doubtful recovery.

Of course, the greater area of lung tissue involved, the greater the danger, not only from asphyxiation or nonaeration of the blood, but the greater strain on right heart on account of obstructed pulmonary circulation.

Whether or not the fact that the lung capacity as compared to the total body weight, being about one-sixth greater in the male than the female, is an important factor in the reported greater mortality among females or not. I am not sure, but simply suggest it.

Certain special symptoms, as follows, may be regarded as especially unfavorable; i. e., a small, rapid, irregular or

d crotic pulse; rapid or labored respiration, with low temperature; persistent temperature of over 104 for more than 48 or 56 hours; gradual rise after fourth, or continuation after the tenth day; coma or low muttering delirium; suppression of sputum in third stage, or the same becoming fetid, or other symptoms of gangrene or pulmonary abscess.

While it is generally conceded that the specific causative germ of pneumonia is micrococcus, lanceolatus or diplococcus of Fraenkel, yet it is claimed by Jacques and others that other kinds of micrococci are capable of exciting independently, true pneumonic inflammation, and that the virulence, and consequently the prognosis, of the case will depend upon the nature of the invading micro-organism. At least it is reasonble to suppose that the virulency of any given case depends largely upon either the kind or complexity of the infection, and under favorable conditions the microscope may become a valuable aid in forming our conclusions as to the future course of the disease.

It is also demonstrated that those cases not presenting the usual leucocytosis are almost always of fatal termination.—*Medical Sentinel.*

The Treatment of Pneumonia (*Medical Record* report of proceedings of New York State Med. Asso.).—Dr. DeLancey Rochester, of Buffalo, read this paper. He said that the chief cause of death in pneumonia was failure of the circulation through degeneration of the myocardium. This degeneration was due to toxæmia and morbid changes in the lung, causing obstruction of the circulation in the right heart. Sometimes uræmia was added to the toxæmia of the invading organism. The most common complications of pneumonia were meningitis, pericarditis, nephritis, and empyema. The indications for treatment were (1) The relief of the toxæmia; (2) prevention of heart failure, and (3) meeting the complications as they arose. The use of stimulating diuretics was positively contraindicated. The first indication for treatment, *i. e.,* the relief of toxæmia, should be met by inducing diaphoresis and mild catharsis. The sweating was most easily induced by hot mustard foot-baths, given in bed, without disturbing the patient. The patient, nude, lay between blankets with the knees flexed, and the feet in tub containing hot water and a heaping teaspoonful of mustard. From two to five blankets and a rubber sheet were placed over the patient, and the bath was kept up from thirty to forty-five miutes, according to the effect produced. Meanwhile cloths wrung out of ice water were kept constantly on the head. This sweating was one of the most important therapeutic measures. Catharsis should be induced by calomel, and maintained moderately by a daily dose of a saturated solution of epsom salts. Frequent cleansing of the mouth with a mild antiseptic solution seemed to him a measure of considerable importance. The diet should be fluid, and, so far as possible, sterile. Plenty of pure or alkaline water should be given in small quantities at short intervals. The sick-room must have sunlight and plenty of fresh air. A physical examination of the chest should be made at every visit, and as soon as there was evidence of congestion in any portion of the lung, vigorous measures should be taken, such as the application of leeches, wet cups or dry cups. In this way the congestion would be prevented from spreading. His preference was for the first two. The cups should be left on for half an hour, and should be reapplied every four to six hours. He had ob-

served post-mortem, the direct anatomical evidence of the value of this procedure. A light woolen jacket should be worn by the patient; the poultice should be relegated to the dark ages. If there were evidence of obstruction of the right heart, from eight to twelve ounces of blood should be taken from the median vein of the forearm, a procedure which could be repeated, if need be, several times during the course of the disease. A little digitalis might be given at this time. After venesection, if heart failure threatened, and there was no distension of the right heart, saline infusion or hypodermoclysis was useful. If more than one lobe of the lung were involved oxygen gas should be inhaled at regular intervals. Direct stimulation of the heart should be begun just as soon as the diagnosis of pneumonia was made. Strychnine should be given hypodermically at intervals of 4 to 6 hours. In alcoholic subjects it sometimes caused cerebral excitement, and if so, ammonia should be substituted. If the bowels and skin were kept active it were seldom that resort to hypnotics became necessary. He desired to protest against the treatment of pneumonia by the use of large doses of digitalis in the early stage of the disease. His own record, with this plan of treatment, was 210 cases of pneumonia, with 23 deaths.

The Relative importance to the Community of Pneumonia and Tuberculosis.—Arnold C. Klebs concludes: (1) That the reative economic importance of pneumonia and tuberculosis cannot be estimated by a mere comparison of total mortality figures for each disease. (2) That the apparently high mortality figure and its nicrease of late, for pneumonia, is produced by the enormous death rate and its increase attributed to this disease in early childhood. (3) That, therefore, the high mortality from pneumonia and, to a certain extent, its increase is due to a classificatio of different ill-defined pathologic conditions under one name, while that from tuberculosis represents that of a well-defined morbid entity. (4) That for this reason and on account of the relative shortness of disabling sickness and frequent recovery in pneumonia, the great length of disabling sickness and frequent non-recovery in tuberculosis, the relative importance of the two diseases is so vastly different that a comparison on economic grounds reveals the overpowering danger from tuberculosis. (5) That the steady decrease of the tuberculosis death rate can be explained on the grounds of the increasing improvement of hygienic conditions in late years and as the result of specific prophylactic measures. (6) That the increase of the pneumonia death rate, occurring in a time of improving hygienic and sanitary conditions and of a general application of antiseptic principles, shows its independence of these features. (7) That, therefore, and in view of the still enormous mortality from tuberculosis, its demonstrated preventability and the possibility of its arrest only in its earliest stages, the institution of educational measures in regard to personal and public hygiene widely and specifically applied, for the prevention of this disease, seems to be distinctly indicated. (8) That since for pneumonia, as pointed out by E. F. Wells, the fundamental information on which prophylactic rules may be formulated is not yet at hand," this subject needs further investigation from a bacteriologic and epidemiologic standpoint as well, before "exaggerated and irrational notions in regard to its dangers and its avoidance" are communicated to the public, which, in view of the facts given, are out of

all proportion.—*American Medicine.*

Management of Catarrhal Pneumonia in Infants.—Kerley, in the course of an article on the subject, in the *Journal of the American Medicine Association* of June 20, 1903, expresses the view that the internal drug treatment is, to a large extent, symptomatic. A great deal of harm may be done to young children in the thoughtless use of drugs in any disease. In catarrhal pneumonia it is particularly necessary that, in our endeavors to assist the patient, we do nothing to harm him, for we are treating a disease in which the resisting powers count for everything. In young children the digestive function is very easily put out of order in health. In illness with fever, and the nervous exhaustion attendant on the illness, the stomach is most easily disturbed; the child is not properly nourished, and the ability to resist the disease is lessened. Expectorant drugs must be given with care, and are better prescribed in tablet of powder form. The practice of using heavy syrups of wild cherry, tulu, and others, with large doses of ammonium salts, only adds to the burden of the patient. For a child of one year of age with catrrhal pneumonia, one one-hundredth of a grain of tartar emetic and one-fortieth of a grain of ipecac answers well as an expectorant. If the cough is very severe and teasing, one-fourth of a grain of Dover's powder may be added to each dose. The drugs may be given in powder or tablet form with sugar of milk and dissolved in at least two teaspoonfuls of water, and given preferable after feeding, not oftener than once in two hours. The ammonium salts so generally used in catarrhal pneumonia as a routine measure are badly borne by the stomach. The muriate is of some value during resolution, but should not be given in larger dose than one-half grain well-diluted, at two-hour intervals. The author rarely uses the ammonium salts.

When there is considerable fever and restlessness, which is not reduced by sponging and when, bathing on account of lack of intelligence in the family, cannot be carried out, a combination of caffene, Dover's powder, and phenacetine, at about four hour intervals, is advised. In giving Dover's powder, it is well to keep watch of the bowel function.

Heart stimulants are usually necessary, and in their selection two points are to be considered—their effect on the heart and their effect on the stomach. But, first, what are the indications for the use of the heart stimulant? Ordinarily, it is thought, they are used too early. A heart stimulant should never be given because the child has pneumonia or diphtheria or scarlet fever, but it should be given in pneumonia, scarlet fever and diphtheria as soon as we learn the heart needs assistance. And, briefly, there are two conditions to guide us—a very rapid pulse, and a soft, usually not rapid, pulse, with a tendency to irregularity. In a general way the author believes that a heart which is beating at the rate of 150 during quiet or sleep, and is not strengthened by sponging, needs assistance, and advocates the use of the tincture of strophanthus, which drug acts as a direct stimulant to the heart muscle. The pulsations by its use, are made stronger and fuller and the beats per minute diminish. When the heart's action shows a tendency to irregularity, with a soft, easily compressible pulse, then strychnine is the remedy. For a child one year old one three-hundredth grain of strychnine may be given every three hours, to be increased to one two-hundredth of a grain every three hours for

a few doses if the case is carefully watched for symptoms of strychnine poisoning. Strophanthus and strychnine possess advantages over all other stimulants in that they do their work, and have no unpleasant affect on the stomach, as is the case with alcohol, digitalis, and the ammonium preparations. If the condition is very urgent, strophanthus and strychnine may be used in combination. Digitalis is rarely employed by the author because of its tendency to interfere with digestion.

Alcohol in the form of whiskey and brandy is very rarely of great service in catarrhal pneumonia. It may stimulate the heart, but its prolonged use greatly upsets the stomach. When used it should be hled off until late in the disease, when other means of stimulation fail. Thus given in large amounts, it has been the means, in the author's of carrying a patient through safely. One-half of one drachm of whiskey, or brandy, well diluted, may be given every one or two hours to a child one year of age. The cases of catarrhal pneumonia, however, actually saved by the use of alcohol are few indeed.—*Therapeutic Gazette.*

Pneumonia.—Lee's second lecture is on pneumonia. He says that when the vitality is feeble or other visscera are damaged or there are old pleural adhesions, when the lungs are fibroid or emphysematous, or the patient is chronically poisoned by alcohol, tobacco or sepsis chance for recovery is small. Pneumonia kills, he says, by a paralyzing overdistension of the right heart on which the toxin seems particularly to act, as particularly distinguished from that of rheumatism which affects the left heart. Most important in treatment is constantly to watch the right heart, preventing overdistention by timely removal of a small quantity of blood, a precaution too often neglected, which fact he thinks is responsible for a large part of the mortality. The procedure should be repeated when necessary. The diet should be such as can be taken without effort and easily assimilated. Milk meets these indications and acts also as a diuretic, thus helping to carry off the toxins. We have to consider, however, that an increased amount passing through the right heart, and he would, therefore, only give small quantities of predigested and highly nutritious elements during the intenser stages of the disease when this cardiac complication is marked. He suggests one-half ounce of sodium and potassium bicarbonate, dissolved in 2 ounces of malted milk every hour for an adult; for a child, two teaspoonfuls in an ounce. After the leech has relieved the heart it is possible to give considerable quantities of water. During the first two or three days he would give milk alone in quantities of two to three pints a day, but not later. Sleep must be obtained, and if pain demands it morphin may be necessary. Even at a late stage or in severe cases morphin may sometimes be safely given if the right heart has been relieved and the air passages cleared by venesection an hour or two previously. But if the right heart has been duly relieved by leeches and local applications of the icebag made over inflamed areas, morphin is rarely necessary unless the pleura is seriously involved. He thinks strychnin is the most useful cardiac tonic; this should be given subcutaneously in dose of ½ to 1 minim of the official solution, B. P., twice daily, in the beginning with a child; and in the adult 2 minims morning and evening at first, increasing to as much as 5 minims if necessary. Atropin by subcutaneous injection is often useful, especially in children; in adults belladonna is less convenient. Oxygen

by inhalation assists aeration of the blood and improves the quality of the blood supply to the heart. It is a true cardiac tonic, but neither strychnin or oxygen will save the patient if the right heart is allowed to become paralyzed. Digitalis is most likely to be of service after the cardiac symptoms are relieved and the fever is moderate. Ammonium carbonate may be given when there is much secretion in the bronchial tubes and repeated small doses of alcohol may be of service, but large quantities are likely to do more harm than good. It is absurd to think that brandy can support the heart when the right side has become paralyzed from overdistension. Ice applications over inflamed areas are of great value, and must be used much more freely than in pericarditis. Lees suggests also that such applications lessen the prolification of bacteria and quotes Dr. Neave, who has investigated on this point. From Washbourn's experiments he concludes that lung consolidation and pyrexia are largely due to the local effects of an albumose produced by the growth of the pneumococcus.—*Journal A. M. A.*

The Critical Time in Pneumonia; How to Meet It.—This, it hardly needs be stated, is when cardiac failure becomes manifest. This phenomenon often appears suddenly, and the less carefully the cases at watched, the more sudden does its onset appear to the worried practitioner. The lesson is plain; prepare for cardiac failure in every case. Watch for, and be prepared to combat the symptom in its very incipiency.

There is very little to record along the line of improvements in former practice; 1902, however, tought us some things. Some of the methods and drugs then used extensively by certain men who follow a "will o' wisp" style of practice, will not be heard from extensively this season. They are mentioned only to condemn; for instance, potassium iodid in ounce doses each day; sodium salicylate in doses of half an ounce daily, etc.

A good safe rule is to follow the practice of the large hospitals, where multitudes of cases are observed and careful records are kept, and then to temper these results by continuous watchfulness and the meeting of each indication as it arises in your own individual cases. To give this aid, we quote from the *International Medical Annual,* 1903:

"The three cardiac stimulants which are used in all hospitals are alcohol, strychnin, and digitalis. Of these, the one that stands first, and on which the greatest reliance is placed, is alcohol, always in the form of whiskey, and practically always in the constant dose of half an ounce, the time of its administration varying from every four hours to every hour, according to indications. There has been a peculiar thing about the use of the second drug named—strychnin. Most can remember when strychnin was seldom, if ever, given as a cardiac stimulant in pneumonia. Now it is universally used. Clinical experience has confirmed what physiological experimentation had long ago proved. When we remember the physiological action of this drug, how it stimulates the heart and tones up the arterial system by its direct stimulant action on the vaso-motor centers, and not (like alcohol and digitalis) by action on the heart muscle and arterial wall, we find an explanation of its effectiveness. Strychnin is never followed by the secondary depression so often seen after alcohol. Talking over its use with the various house physicians, we learn that the two indications which call for its use are: (1) When whiskey is not able to hold the heart; they always use

it secondary, however, to whiskey—to reinforce it, as it were; (2) when there is evidence of pulmonary edema and cyanosis, then it is generally given hypodermically in 1-20 grain doses. At two hospitals this second symptom is the special indication for its use. All alcoholic cases were especially found to respond to the action of this drug. At all the hospitals, when in spite of the alcohol and strychnin the pulse became very rapid (130 and over) and feeble, digitalis was given, either five minims of the tincture every three hours, or two minims of the fluid extract every four four hours. This drug is not given as a routine practice, only when after whiskey and strychnin have both been given, heart failure is found to be increasing. The only other drug that we found used in the hospitals was nitroglycerin. All the hospitals use it occasionally. Beside the pulse of high arterial tension, that may call for its use in any case, cyanosis is the one symptom that especially indicates its use. At one or two hospitals it is always used when cyanosis becomes marked; at one, when edema of the lungs develops it is generally given. Atropin and caffein are not given in pneumonia in any of the hospitals.—*Medical World.*

Influenza in Children.—There are certain essential differences in the symptoms of influenza, as it appears in children from that form which is seen in adults. With children fever and cerebral symptoms at the beginning of the disease are of primary significance. Rudimentary forms may be manifested by general malaise, lassitude, want of activity, and disinclination to play. In well-developed cases the disease usually begins abruptly the same as in adults, but instead of well-marked chills there are usually only chilly feelings alternating with feelings of heat. The chilliness may be accompanied with convulsions, and the latter be succeeded by drowsiness which may last twenty-four hours more. When very young children have this disease they are apt to be fretful and complain whenever any change is made in their position. Older children complain of pains in the head, the lumbar region and the limbs, and there may also be intense mental dullness, which may extend to loss of consciousness. Other symptoms are loss of appetite, paroxysms of cough, vomiting or diorrhœa. In grave cases death may occur within forty-eight hours. In the majority of cases the pathological process is limited to the mucous membranes, the respiratory passages being first attacked, after which may follow conjunctivitis, epiphora, difficulty in deglutition, deafness, and possibly cough. In very young children there may be dyspnoa of an alarming character. There is usually swelling of the cervical ganglia.—*Wormley in Medical Times.*

Treatment of the Throat in Influenza of Children.—In the *Journal of the American Medical Association* of July 4, 1903, Williams points out that in septic cases there is membranous inflammation of the throat and nasopharynx, with increased action of the muciparous glands. These mucous membranes present a large absorbent surface richly supplied with lymphatics, and in these cases we have enlargements of the surface of the glands, continued fever, and a general infection. In these cases treatment of the throat and the nasopharynx is extremely important. The author believes there is no treatment so efficacious as irrigation of these parts with a warm salt solution. This is to be accomplished by means of the fountain syringe. It is usually better to wrap the child in a sheet

so that it will be completely under the control of the attendant. Personal supervision is advised for this treatment, at least for the first time. The mouth and throat are first to be irrigated; when irrigating through the nose the mouth must be kept open. The author is of the opinion that fluid is not driven in the Eustachian tube unless the patient attempts to swallow during the treatment. If the jaws are kept separate deglutition cannot take place. The amount of purulent material that is washed away in some of these cases in a single treatment is remarkable. These treatments are to be repeated according to the exigencies of the case; two or three in twenty-four hours, for two or three days, are usually sufficient. The temperature has been observed to drop two or three degrees after this treatment. In cases where the discharge from the throat and nose is fetid, the use of permanganate of potassium, five grains to the pint, is of benefit.

In the septic cases stimulants are always indicated, and should be given frequently and at regular intervals. The condition of the heart should be our guide in the use of strychnine or other cardiac stimulants.—*Therapeutic Gazette.*

Inversion in the Treatment of Acute Pulmonary Edema in Young Children, With Report of a case.—In the treatment of this grave form of illness in young children, Southworth recommends in the *Archives of Pediatrics* for May, 1903, the following method, first pointing out that mechanical measures are often most hopeful adjuncts to other treatment in various abnormal conditions of the organs, and that inversion has long been used in aiding the expulsion of foreign bodies from the pharynx and larynx as well as in the cerebral anemia of threatened death during chloroform narcosis. In the modified form also—laying the child face downward on the knees of the nurse with the head lower than the hips—it has been found helpful in cases of acute bronchitis or borncho-pneumonia where the profuse secretion of the bronchial mucosa can not readily be forced upward against the action of gravity, owing to feeble cough or the general exhaustion of the infant. Its employment heretofore in acute pulmonary edema has not, however, been revealed by a fairly comprehensive search of the literature of the subject. It therefore would seem advisable to place on record an instance where the prompt use of this simple procedure seems to have been largely conducive to the recovery of the patient.

H. M., female infant of thirteen months, patient in the Infants' Hospital, Randall's Island, had one month before made an uneventful recovery from a pneumonia involving the upper lobe of the right lung. Ten days before the onset of the edema there had been a slight attack of diarrhea, which had entirely disappeared, and the infant had been apparently well and happy all day. On her return about 4:30 p. m. from an early supper she was given the usual colon irrigation, which she had been receiving once daily since her attack of diarrhea, and was prepapred for bed. Suddenly during the undressing she appeared to be drowsy, then sank limp and unconscious into the arms of the nurse. The house physician, Dr. W. B. Allen, was summoned and reached the patient within ten or fifteen minutes, and found the child thoroughly relaxed and unconscious. Breathing was not much accelerated, but audibly rattling, face slightly flushed, pulse feeble, temperature 99.8 degrees F. per rectum. Palpation revealed very marked increase in tactile fremitus, and auscula-

tion gave large and small bubbling rales diffused over both lungs. Dr. Allen with happy inspiration and good judgment inverted the child and held her head downward, making firm, steady pressure over the lungs with stroking pressure over the bronchi toward the head. This resulted in squeezing out quite a little frothy fluid tinged with blood, which ran out of the mouth and nose. Decided relief was immediately noticed by those in attendance. The child was then placed in the bed, the foot of which was considerably elevated. Aromatic spirits of ammonia, strychnine, and brandy were administered freely, and mustard pastes were applied to the entire thorax until a bright redness of the skin was produced. In about one hour the patient was able to cry a little, and at 9:30 p. m. the rales had cleared up very markedly, and the patient was resting comfortably with temperature 97.8 degrees F. Stimulation was continued during the night. Calomel in fractional doses followed by castor oil and an enema resulted in undigested, offensive stools. The next morning the child was bright, lungs free from rales, and she was practically well, in which condition she has remained since, there having at no time been any evidence of cardiac affection.

Acute edema of the lungs without discoverable cause has not been uncommon among the patients of the institution, and as several previous cases had died despite the same medication, it seemed evident that the expression of the rapidly accumulating serum from the bronchi was a life-saving measure, inasmuch as it gave temporary relief and allowed time for the action of other remedial measures. The undigested and offensive stools which resulted from purgation would suggest acute indigestion as one of the possible etiologic factors in acute pulmonary edema of young children—*Therapeutic Gazette.*

Specific in Pneumonia.—(By H. B. Stanley, M. D., San Miguel, Cal.)—Is there such a thing as a "specific" in the treatment of pneumonic fever? Yes, I believe there is. In my opinion glonoin or nitro-glycerine enjoys that distinction. I have been using the drug in an extensive practice for the past seven years without a single failure. Before I commenced to prescribe nitro-glycerine in pneumonia, I lost about five per cent. of my cases; but now my average death-rate in that disease is less than one per cent. Especially is the effect of this drug remarkable in children and in debilitated alcoholics. I make it a part of my routine practice to give from 1-100 to 1-50 grains of nitro-glycerine, tablet form, every four hours from the appearance of the first symptoms until the crisis is passed and the pulse becomes slower than normal. By the use of this drug no case of uncomplicated pneumonia need last longer than seven days, and often four to five days will see the patient convalescent. Are any other remedies necessary in the treatment of this disease? Yes, surely. Each dose of glonoin should be accompanied by from three to six grains of quinine. This should be given every four hours. If the fever be high the following prescription will be of great service and will render the patient much more comfortable: R. antipyrin dr. ii, tinct. digitalis dr. ii, aqua comporae oz. i, syr. tolu. q.s. a.d. oz. ii. M. sig. Teasponful every four hours while there is fever. As an application to the chest the following will be of great service, and will render the atmosphere around the patient sterile: R. oil cassiae, oil caryophylli, oil bergamot, oil eucalypti aa. dr. iiss, oil sassafras oz. i, oil gossypi sem, q.s. a.d. oz. viii M. sig. Anoint

the whole chest night and morning and apply all over the whole chest two layers of sheet wadding. Regardless of the condition of the bowels the patient should have ten grains of calomel each day. Should the bowels move too freely, from the calomel or any other cause, the following prescription will be of service: R. bismuth sub. nit. oz. ss, tinct. opii. camp. q.s. a.d. oz. iii M. sig. Shake well and give a teaspoonful after each evacuation of the bowels. Should the cough be harsh and dry the following prescription will be of service: Ammonii chloridi dr. ii, syr. epicac dr. ii, syr. prun. q.s. a.d. oz. iii. siz. Teaspoonful every two hours while coughing badly. After complete defervescence, as a tonic the following will be as good as any: R. Syr. Hyphosphites Co. oz. iv. sig. Teaspoonful before each meal. With the foregoing treatment carried out and modified to suit different cases no physician need fear pneumonic fever. If the patient be weak and anemic a strong ekk nog three times a day will do good. As a last warning I will add: *avoid all depressants in pneumonic fever unless thoroughly guarded by a powerful excitant.—Pacific Med. Jour.*

Influenza, Nervous Drepression Following.—Among the sequclae of influenza one of the most important and remarkable is the extreme depression from which many patients suffer even in cases where the attack of influenza has been slight. A short time after convalescence begins the patient complains of insomnia, great weakness, and loss of appetite for all kinds of food. On getting up he is immediately attacked by giddiness; there is a tendency to fall forward; the least movement may bring on vomiting of a particularly mucous viscid material. He is thrown into a profuse perspiration, and is glad to return to bed. Any muscular effort may be attended with dyspnoea. In less marked cases the patient may be able to walk a little distance, but after a short time the feeling of intense weakness which is characteristic of this state brings him to a stop, and dangerous syncope may result. The gastric symptoms in such cases are always prominent. In many instances mental symptoms are also present. Any mental work is impossible, and reading soon causes fatigue. Memory is considerably affected, the patient forgetting the name of objects. He is inclined to take an exaggerated view of all his symptoms, and the fear of impending death may greatly trouble him. This state of nervous depression may continue for several months. The treatment of such cases is important, and among the best means is the exhibiton of strychnine and caffeine. The former may be given in the usual doses, or as arseniate of strychnine in small doses. In the worst cases a subcutaneous injection of strychnine is necessary. Preparations of caffeine have a more tonic effect in these cases than ether. It may be given in conjunction with benzoate of soda or else as a subcutaneous injection dissolved in distilled water with salicylate of soda. Mancel (These de Paris; *British Medical Journal,* July 18, 1903).—*Cyclopedia of Medicine.*

A Report of Eight Cases of Pneumonit in Infancy Treated With Antipneumococcus Serum—(John Lovett Morse, *Archieves of Pediatrics,* July, 1903.)—During the last dozen years many attempts have been made to produce a serum of therapeutic value in the treatment of pneumonia in man. The Klemperers were the first to produce immunity experimentally. They first used filtered cultures and succeeded in obtaining a serum which protected other animals against fatal pneumococcus

infection. They were able to demonstrate a protective body in the blood which they termed antipneumotoxin. Its therapeutic value was, however, very feeble. Its action was largely, though not entirely, antitoxic. Other investigators have used sera obtained from men ill with or convalescing from pneumonia. Their results have been equally unsatisfactory. Others have, by the use of living cultures, produced sera which protected against virulent pneumococci and possessed a certain therapeutic value. These sera exert a direct destructive action on the bacteria, but probably have little or no effect on the seperable toxines of the pneumococcus —that is, they are anti-infectious rather than anti-toxic in their action. Such sera are usually known as antipneumococcus sera. The results with these sera have likewise been unsatisfactory, probably because that while they are rich in the immunizing body, they are probably lacking in the end body or complement.

Morse reports the results of his experience in the treatment of pneumonia with these sera.

In all there were eight infants. The serum was injected every four hours, while the temperature was taken in the rectum every two hours. The amounts of sera used varied from 50 cc. to 180 cc.

A study of the charts appended fail to show that the serum had any effect on the temperature in a single case. In no case in which the time of the onset could be determined was the course of the disease shortened. In fact, the crisis occurred later in these cases than is usual. No effect on the rate of the pulse or respiration was noted in any case. Nothing was noted to justify the assumption that the subjective symptoms were in any way relieved. The physical signs increased in six cases while the serum was being used in the others there was no change. Two cases developed purulent inflammation of the middle ear, and two cases empyema. Two died—one of nephritis and one of cardiac failure. In neither case was there anything to show that death was due to, or hastened by, the use of the serum. The serum was well absorbed in all the cases except one, in which it caused swelling, tenderness, and induration about the seat of injection.

About all that can be said for the serum in this series of cases is that while it apparently did no good, it certainly did no harm.—*Maryland Med. Journal.*

Abdominal Pain in Pneumonia.—(By Charles S. Grabin, M. D., Bremer, Neb.).—The manifestation of abdominal pain in pneumonia without intestinal complication has been recorded several times of late. In April, 1903, I was called to see a child, who was supposed to be suffering from some intestinal trouble, the little one complaining of severe and persistent pain in the abdomen. The history and close examination revealed no abdominal trouble. Bowels about normal; pulse 130, temperature 103.5 degrees in the axilla, respirations 40. There was marked flushing of the face, the breathing was puerile in character, and upon percussion marked consolidation of the right lower lobe was found. Complete recovery took place in a few days. My conclusion is that in these cases the pain is purely reflex. When we once consider the nerve supply of the lungs and stomach and the various distributions of the pneumogastric, the explanation of this occurrence is quite possible.—*Medical Record.*

The JOURNAL wishes all readers a Happy New Year.

MEDICAL NEWS AND ITEMS.

Dr. R. E. Jenkins, of Belmont, N. C., died on January 11th, after an illness of about two weeks, due to an attack of typhoid fever.

Dr. J. D. Roberts, who for some years has resided at Jefferson, Ashe county, N. C., has removed to Mt. Olive and engaged in practice.

Dr. Thel. Hooks, of Smithfield, N. C., a young physician of good promise, was married to Miss Eva Hood, December 31st. The JOURNAL'S best wishes are extended to the happy young couple.

Dr. W. P. Exum, Jr., who has been practicing very successfully at Spencer, has moved to his former home, Goldsboro, N. C., where he will continue the practice of his profession.

Dr. Charles S. Boyce, who figured in the courts for several months, died suddenly recently of paralysis at Salamanne, N. Y.

The St. Louis Medical Society has its race problem. Its 700 members are debating the question whether to allow negro physicians in the society. A vote has not yet been taken.

Resignation of Dr. Goelet.—Dr. Augustin H. Goelet has resigned the chair of Gynecological Electro-therapeutics in the International Correspondence Schools of Scranton, Pa., to take effect January 1, 1904.

Dr. Wm. B. Brown, the oldest physician in Greenville, N. C., died at his home on November 12th. At the time of his death he was the oldest citizen of the town, in which he had practiced his profession for half a century. Five sons and one daughter, all grown, survive him, one of his sons being Dr. Zeno Brown.

Dr. Cyrus Edson, of New York, died of pneumonia December 2, 1903, at Roosevelt Hospital, after a short illness, aged 46 years. He was health commissioner during a portion of the administrations of Mayor Gilroy and Mayor Strong. He worked out important problems in the health department and acquired a large practice after his retirement from office.

At a recent meeting of the Directors of Messrs. Parke, Davis & Co., Mr. E. G. Suift was elected to the position of General Manager. Mr. Suift has occupied positions of trust in this business for many years and enjoys the confidence of those who are in position to know him best. THE JOURNAL extends congratulations and hope for him a full measure of success.

Doctor, would it not be a great convenience if you could take a $1.00 or $2.00 or a $5.00 bill, write a name thereon, place a 2c postage stamp on the bill and then mail it and thus send it safely through the mails? The Post Check Currency Bureau is endeavoring to have a bill passed by Congress providing for this feature. Write your congressman that you want the bill to become law.

Suit Against Physician.—In Terre Haute, Ind., a suit for $5,000 damages for mal-practice was filed in the Superior Court by Joseph Kennedy against Dr. Stephen M. Rice. Kennedy broke his right arm in November, 1901, and Dr. Rice was called to set it. Kennedy claims the arm was not skilfully or properly set, and since the doctor treated it it has been useless.

Pneumonia in Chicago.—The Chicago board of health is confronted with a serious problem by the prevalence of pneumonia, which has established a new death record. The county hospital is crowded and only the most serious cases are taken in. The disease has claimed 139 victims in seven days ending Saturday, 27 per cent. of the entire death list.

Doctor on Trial for Spreading Disease.—Dr. D. L. Peet, of Practor, Pa., was recently placed on trial for spreading contagious disease, it being alleged that he visited patients ill of smallpox and then mingled with healthy persons, and that he also destroyed a red lamp used as a danger signal. The defence was that the disease was chickenpox and the breaking of the lamp was accidental.

The Physician.—A popular impression prevails that the physician, by reason of the privileges conferred upon him by the State, is, in the absence of an adequate reason for not so doing, required to respond to all calls to render professional services. This is clearly erroneous, except where the physician has already undertaken the treatment of the case or except where he is an officer of the government charged with specific duties which he thereby violates.

Forsyth County Medical Society has set all other similar medical organizations a good example. The "brethren" got together the other night "around the festive banquet board" and had a good time. There were "heart to heart" talks between the doctors and sayings that will lighten the burden of life of all present for some time to come. To all other societies we say "go and do likewise." It will do you good and your patients also.

Typhoid Fever.—More than 1,500 persons in the city of Butler, Pa., have been attacked by typhoid fever, and the State Board of Health has, after investigation, traced the source of the disease to water furnished by a local water company. During the summer, while a new dam was being constructed, it is alleged, the company pumped water from a creek near the town, in proximity to which there were a number of cases of typhoid fever.

Massage by the Blind.—Among the Japanese from whom we have yet much to learn, massage is generally recognized as the work of the blind. The sightless Japanese operators are masters in their useful craft. The blind are usually endowed, by way of compensation for their loss of sight with a sense of touch exceptionally acute, so that here is a field in which they may surpass their seeing fellows. Massage is chiefly dependent for its success upon the delicacy of its application, which depends in its turn upon the nicety of the operator's sense of touch.

A new disinfecting apparatus, of French origin, is based upon the evaporation of formic aldehyde. The solution of formic aldehyde is boiled in a vessel heated by a spirit or other lamp, the escaping vapors being led through a tube made flexible, so that it can be passed through the keyhole of the door of the room to be disinfected. A gage shows the level of the liquid, and scales are provided to show the amount of liquid to be evaporated to disinfect the room properly.

Dr. F. O. Hawley, the city physician of Charlotte, N. C., has recently received a patent on a fumigator, which he says is much simpler and more effective than anything else he has seen for the purpose. The city recently suffered from an outbreak of smallpox, and was compelled to buy a number of fumigators, and nearly all of them were unsatisfactory in some respects, and those which did the work properly were generally very expensive or cumbersome. The device which the doctor has made can be made and sold for about one-third the cost of the average implement of this character, and the doctor says that he has several times demonstrated that it can do more work than the best of them.

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Menorrhagia.—Dysmenorrhea.— (From The Medical Summary):

The following formulæ have proven of value, when indicated :

MENORRHAGIA.

℞ Fl. ext. ergot ℥ iss
Acid gallic..... ʒ ij
Tinct. cinnamon..... ʒ ij
Aqua cinnamon q. s. ad. ℥ iv

M. Sig.—Shake well. One ounce, in water, every three, four or five hours.

Or—

℞ Acid sulphuric aromat ℥ iss
Tinct. ferri chlor ℥ j

M. Sig.—Ten to twenty drops three or four times daily.

DYSMENORRHEA.

℞ Tinct. pulsatilla..... ʒ j
Tinct. cimicifuga ʒ ij
Tinct. gelsemium..... ʒ j
Tinct. viburnum prun ʒ iij
Syr. ginger q. s. ad. ℥ iv

M. Sig.—One dram every three or four hours, for three days, before and during menses.

Use acetanilid if acute pain.

L. P. PONS, M. D.

Orchitis.—Take tincture of pulsatilla and apply to scrotum every two or three hours, keeping moist with same, till swelling subsides.

Or—

℞ Fl ext. belladonna..... ℥ ij
Tinct. iodine ℥ ij
Spts. terebinth..... ʒ ij

M. Sig.—Apply as above directed.

L. W. MORLEY, M. D.

Pleurisy.—

℞ Pilocarpinae hydrochloratis, gr. j
Sacchari lactis, gr. xx.
Alcohol, q. s.

M. Ft. tabellae triturationes No. xij. Sig. One or two tablets by mouth or hypodermically every hour until profuse sweating.

Indications: In pleurisy with effusion. Contraindicated in asthenia, and also in the presence of circulatory depression.—Ex.

Anti Rheumatic Salve—

℞ Acidi salicylici.
Ol. terebinth.
Lanolini, aa ℥ ss.
Adipis, ℥ ij.

M. Sig. Apply in a thick layer, cover with wadding and gutta percha tissue and retain with bandage. After the superficial epidermis is destroyed, omit the turpentine.—Sterling.

Or—

Rx. Ichthyol.
Aq , aa ℥ iiss.
Lard, ℥ j.

M. Sig. Apply in articular rheumatism.—Arendt, Medical Record.

Flatulent Dyspepsia.—

Rx. Magnesia.
Phosphate of lime.
Powd. charcoal.
Sublimed sulphur, aa 10 0.

M. Sig. Teaspoonful in water p. r. n.—Medical Record.

Pulmonary Oedema.—In pulmonary oedema a one-fifth grain of strychnine and a one-hundredth of a grain of atrophine injected beneath the skin below the clavicle, repeated according to indications, will relieve and save many cases.—Donovan, Medical Record.

The Great Problem

In the successful treatment of consumption, scrofula and wasting diseases generally, the great problem is **how to add fat to the diet in a form that will be assimilable** without overtaxing the digestive organs. It is not what one **eats**, but what one **assimilates** that supplies food to the fat-starved tissues.

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Hydroleine supplies the **maximum quantity of oil with the minimum amount of tax upon the digestive organs.** It is readily retained by the weakest stomach and is entirely absorbed. As a producer of weight and strength it has no equal. Samples free to physicians.

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Spasmodic Respiratory Disorders.—A discussion arose among a coterie of physicians as to the best all around remedy for the treatment of asthma and disorders of the respiratory tract spasmodic in their nature. The occasion was the last meeting of the Ohio Valley Medical Society, at Evansville, Ind., where the Tilden Company had an exhibit of some of their special pharmaceutical preparations, prominent among which was Respirazone and Narkogen, their new hpynotic and anti-spasmodic. One suggested that there was no reliable remedy for asthma. This evoked a storm ofprotest from a number of physicians, who pointed to Respirazone (Tilden's) as one of the remedies which had hardly ever failed in their hands to accomplish the desired results of giving relief for this distressing conditon. A voice was raised in favor of another of the Tilden company's remedies, Eirwein, and pointed out its special indication in those forms of asthma which are associated with chronic bronchitis. It was supposed that the relief this remedy affords in asthma is due to its curative effect upon chronic catarrh of the air passages. Narkogen (Tilden's) came in for honorable mention as an intercurrent remedy during the attack, having on several occasions ensured sleep by its prompt relief of the spasmodic constriction of the air cells and bronchioles. Physicians who have not already tried Respirazone and Eirwein should do so and be certain to specify Tilden's to ensure the desired results.

Is it worth while to try this simple but very satisfactory and effective method of treating inflammations of the respiratory tract? In acute bronchitis or "fresh cold," with frequent hacking cough, dryness of the respiratory mucous membrane and sensation of soreness in the chest, Gray's Glycerine Tonic is one of the most valuable remedies known. It allays the irritative hyperaesthetic condition of the entire respiratory mucous membrane so that after a few hours cough is lessened, bronchial distress and soreness become less pronounced, and the expectoration of secretions very much facilitated. It is an absolute fact—long since priven by experience—that most cases of acute bronchitis will be aborted in a few days by Gray's tonic, taken clear, i. e., without the addition of water, in teaspoonful doses every hour.

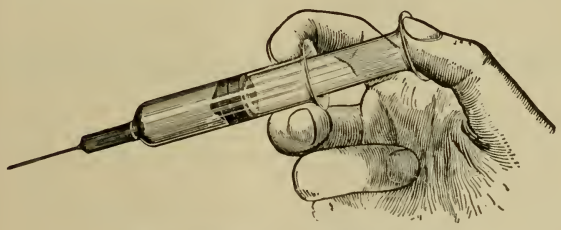
This remedy has unquestionably a specific selective influence upon the entire respiratory tract; it is constantly employed by hundreds of experienced physicians as a routine remedy wherever respiratory inflammation exists. It lessens hyperaemia and turgesence of the mucous membrane, thins, liquifies and promotes easy expulsion of accumulated secretions, checks cough, and allays excessive sensibility of the larynx, bronchi and pulmonary structures.

Moreover, these beneficial effects are noted even when the inflammation is diffused over a large area of the respiratory tract—in chronic bronchitis, pneumonia, influenza. Physicians employ Gray's Tonic in this class of cases because its value is immediate and pronounced even after persistent, judicious use of expectorants and respiratory sedatives has failed.

It is, as pointed out by Fothergill, an indisputable fact that many of the common forms of respiratory affections owe their origin and continuance to an underlying constitutional state of debility or malnutrition—appropriate tonic medication is always indicated.

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Glyco-Heroin (Smith) Compared with Codeine and Morphine.—Aside from the alter-effects of morphine, such as nausea, general lassitude, vomiting and vertigo, it has the disadvantage that the patient become readily addicted to it and chronic morphinomania occurs, especially in neurotic persons.

Codeine in its physologic action resembles narcotine, though the narcotinc stage is not so much pronounced. When administered in small doses intestinal peristalsis is promoted, while in large doses it produces diarrhœa in consequence of complete relaxation of the intestinal muscles, owing to paraylsis of the nerve centers governing the intestines.

The sedative action of Codeine is unreliable.

Expectoration is not promoted by morphine or Codeine, while Glyco-Heroin (Smith) acts as a stimulant to the respiratory centre and stagnation of the secretions is excluded.

Comparative doses of Glyco-Heroin (Smith) and Codeine show the latter to produce nausea, vomiting and vertigo, while these symptoms are absent during the administration of Glyco-Heroin (Smith).

Unlike morphine preparations, Glyco-Heroin (Smith) does not constipate.

Glyco-Heroin (Smith), as a respiratory is sedative decidedly superior to the preparations of opium, morphine, codeine and other narcotics, as it is devoid of the toxic or depressing effects, which characterize the latter, when given in doses sufficient to reduce the reflex irritability of the bronchial, trachael and laryngeal mucous membranes.

In bronchitis, where a volatile antiseptic is indicated, Listerine is freely used by practitoners, with a steam spray apparatus. It should be largely diluted at first and the patient taught to take long, deep inhalations. After a few

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This is undoubtedly the Antiseptic Age in Medical history, and many are the chemical agents used as "Antiseptics." The "deseradatum" is an agent that is convenient, harmless and low in cost; one that will destroy germs of disease and gently stimulate tissue repair.

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minutes the tendency to cough generally subsides and the patient experiences relief. Where there is much irritation or relaxation, an astringent, or in severe cases, a local anodyne may be added to the solution.

J. Addison Stucky, M. D., Lexington, Ky., writes: "The first thing to be done in the treatment of nasal catarrh is to thoroughly cleanse the parts. This is of paramount importance. The means employed to accomplpish this should be mild and non-irritating. Anything which produces pain which lasts longer than a few seconds, should not be used. I usually use for cleansing purposes the following mixture, which is a modification of "Dobell's solution:

Rx.

Sodæ bicarb , Sodæ biborate, äädr.	½
Glycerine,	oz 2
Listerine,	oz 1
Aquæ,	oz 5

"This solution, when slightly warmed and used in the form of a spray, produces a very pleasant sensation, and is excellent for cleansing and disinfecting the nasal cavities."

"Physicians are frequently called upon to prescribe for car-sickness, theater and shopping headaches, school headaches, and many ill-defined headaches," says the *American Inventor.* "Car-sickness affects persons traveling for a few hours on trains, and even some who ride but a short time on trolley cars. The looking at passing objects brings on a sense of nausea which compels them to either close their eyes or change their position. In the same manner sitting in a theatre or any auditorium brings on a browache, which is very uncomfortable and compels the sufferer to close his eyes for relief. Shopping headaches are confined to the female sex, and are probably due mostly to the examination of striped goods In all of these cases just mentioned there is generally an astogmatism."

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The Antiseptic Age.—The history of our race has been divided by scientific historians into different "ages," as, for instance, "The Stone Age," "The Bronze Age." In the history of medicine the time in which we live will be known as "The Antiseptic Age," by reason of the immense strides now being made in the treatment and prevention of disease by the use of antiseptics. What antiseptic agents to apply and how to apply them are now intensive questions. In the treatment of catarrh of the vagina and uterus, of gonorrhea in male and female, of dysentery, of catarrh of nose and threat an agent is required that is destructive and prohibitive to pathogenic bacteria and at the same time its action must be so mild that its application to an inflamed mucous membrane will result in gentle stimulation of the reparitive process. It must also act as a gentle astringent and at the same time be soothing to the inflamed tissues. A combination of carbolic acid (C. P.), boric acid, alum, biborate of soda, menthol, sulph. of hydrastrin and glycerine meets these indications. These antiseptic agents are prepared in powdered form for physicians' use exclusively, and marketed at a very reasonable price by The Luekretol Chemical Co, Winston-Salem, N. C.

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Indeed, experience proves that Gray's Tonic yields excellent results in most cases of chronic bronchitis, winter cough, etc., so commonly observed in the atonic, the enfeebled, the debilitated. It not only palliates the respiratory symptoms but overcomes the ever-present element of constitutional depression.

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How a Pullman Car is Cleaned.—The management of the Pullman Company, in controversion of the recent criticisms of the sanitary condition of their cars has sent out this statement of just what the process of cleaning a Pullman car is: As soon as a Pullman car arrives at its destination it is entirely stripped, the carpets are beaten and aired and the interior of the car is thoroughly scrubbed with soap and water. The blankets are taken out of the car and are thoroughly blown out with compressed air at a ninety-pound pressure. It is impracticable to wash them after every trip, but they go to the laundry several times a year, which is oftener than is the case with hotel blankets. All linen is renewed each trip. Every case of sickness in a car, however trivial, is followed by the antiseptic cleansing of the section occupied by the sick person, and the entire car is sprayed with formaldehyde. As a further sanitary precaution, in the newer cars of the company, purely decorative draperies are being omitted, and the necessary ones, such as berth curtains, are being made of a lighter material which does not hold dust or odors.

The Health of the Kaiser.—The reports received as to the health of the Kaiser are of so conflicting a character that but little reliance can be placed in them. One thing, however, is certain, and that is the marked apprehension of the German people in regard to their emperor's condition. According to the New York *Sun,* December 6th, those who have seen the Emperor since the operation on his vocal cords speak sympathetically of the sudden appearance of signs of age beyond his years, and his somewhat haggard expression. The fact is, that the Kaiser has overworked himself in every way, and in addition to his throat trouble is suffering from physical exhaustion. He needs a complete rest.—*Medical Record.*

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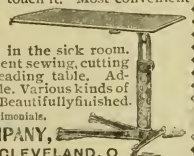
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Smallpox in Philadelphia is at present more prevalent than it has been in many years, and the disease continues to spread, despite the most strenuous efforts of the health authorities. Unfortunately, many persons decline to be vaccinated, and thus become media for the extension of the epidemic. The most urgent need of the hour seems to be a statute making vaccination and revaccination universally obligatory. Ninety-nine new cases were reported for five days ending December 4, and 1,579 more cases were reported since January 1, than during a corresponding period two years ago. The disease is not confined to any particular locality, but is pretty evenly distributed throughout the city. It is rather more prevalent in the congested sections, and negroes are the victims in large proportion. Foreigners, on the other hand, almost wholly escape, because they have been repeatedly vaccinated, both in their native land and on arrival in this country.

The Seaboard Medical Association adjourned on December 18th after a three days' session in Norfolk, Va., choosing Washington, N. C., as the next place of meeting, and electing the following officers: President, Dr. M. Bolton, of Rich Square, N. C.; first vice president, Dr. R. H. Cobb, of Franklin, Va.; second vice president, Dr. E. T. Dickinson, of Wilson, N. C.; third vice president, Dr. E. F. Reese, of Southampton, Va.; fourth vice president, Dr. J. E. Smithwick, of Jamesville, N. C.; secretary, Dr. John R. Bagby, of Newport News, Va., (fifth term); treasurer, Dr. Israel Brown, of Norfolk, Va., (fifth term); orator, Dr. T. E. Baird, of Norfolk, Va.

Members of the Chicago Raw Food Society declare that John D. Rockefeller owes them $1,000,000 for a new stomach. The president of the society prescribed a diet of raw cereals and sent the oil magnate a supply of macerated wheat to be eaten instead of bread. Since then Mr. Rockefeller has rapidly improved in health. The society claims to have caused his hair to grow, made his teeth firm and his physical condition comparatively perfect. There are, it is said, 10,000 homes in Chicago where no cooked meat is eaten, where no bread is baked, no vegetables boiled or fried, and no pastry is indulged in. Meat is eaten raw and red, cereals are simply macerated and eggs are swallowed in their native state, with a dash of salt and pepper to give them flavor.

Elixir Maltopepsine with Glycerophosphates

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RESPIRAZONE

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Antiasthmatic. Useful in all spasmodic respiratory diseases as Asthma, Hay Fever, Croup, Laryngismus Stridulus, Whooping Cough, etc.

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The foremost alterative, Superior in all Strumous, Syphilitic and Cutaneous Diseases. Beware of substitutes. Get the Genuine and get results.

An ideal digestive and tissue constructive tonic of universal applicability in all wasting diseases and nervous disorders, with faulty digestion, stomachic or intestinal. Furthers assimilation and growth of bony tissue. Each fluid dram contains Glycerophosphate Calcium gr 1; Glycerophosphate Soda grs. 2; Glycerophosphate Iron, grs 3-16; Glycerophosphate Mangase gr. 1/6; Glycerophosphate Strychnine gr 1/60; Maltopepsine grs 10. In dram doses is economic to dispense — very prompt results.

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Hypnotic Anodyne Antispasmodic.

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Chloral Hydrate,	grs. X
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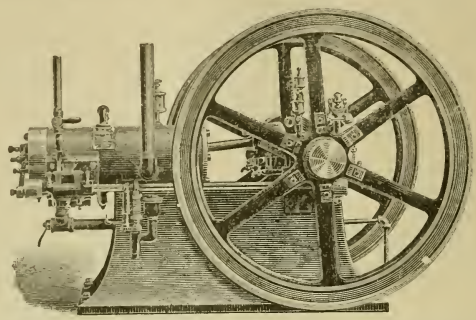
New Lebanon, N. Y. **St. Louis, Mo.**

Spitting an Acquired Habit.—In the Department Circular—Suggestions for the Teaching of Cleanliness Among School Children—the first injunction to the teacher is that children should be taught "Not to spit; it is rarely necessary. To spit on a slate, floor or sidewalk is an abomination.!" Until this injunction is heeded and enforced antispitting ordinances will do little good. The spitting habit is acquired early in life. It can be best and most surely suppressed at the same period. Stop the beginning. All teachers, from the kindergarten up, should wage war against spitting. The child is an imitative animal and to too many his ideal is the hoodlum and street arab who can squirt through his teeth. Following him as an example can be prevented as readily as imitation of his other undesirable traits. Teachers have it in their power to make "Don't spit" placards unnecessary.—*Los Angeles Medical Journal.*

The Proposed Post Check Currency.—Mr. Gardner, of Michigan, has introduced into Congress a bill "to prevent robbing the mail, to provide a safer and easier method of sending money by mail, and to increase the postal revenues." It provides that after its becoming a law all paper currency of the denominations of one dollar, two dollars and five dollars, except national bank notes, shall be of the form to be known as post check notes, or currency, with facilities for the holder's making it payable to a named payee. It is not within our province to comment on the economic features of this proposed legislation, but we do say most emphatically that its enactment would result in giving us something that has long been a crying need—a clean currency—for no bill would be reissued after it had been paid. We hope therefore that the bill will pass. If you agree with us, write your congressman.

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Pretty Christmas Party to Employes.—One of the pleasantest events of the holiday season in the drug circles was a buffet luncheon given on last Thursday by Fairchild Bros. & Foster to their employes. It was a complete surprise to the guests, who numbered about 140. A big table in the work room on the fourth floor at 74 Laight street fairly groaned with all the good things prepared by Maresi's chefs, and was decorated with potted plants presented to members of the firm by the members of the office staff. B. T. Fairchild welcomed the guests to the "Christmas party," as it was called, and E. W. Dusenberry responded, after which Messrs. S. W. Fairchild and M. G. Foster also spoke. There was music during and after the luncheon, which began at 12:30, and at three o'clock the annual presents in gold were distributed among the employes, and the rest of the day was declared a holiday.

Dr. Murray Dead.—Dr. R. D. Murray, a yellow fever expert of international renown and a member of the Marine Hospital Service, died November 20th of injuries received in a runaway accident one week previous, while returning from the bedside of a yellow fever patient, whom he had been treating. When he had been in the hospital several days, pneumonia set in, resulting in his death. Dr. Murray was a native of Ohio, and was 64 years old. He was a civil war veteran and a member of the Grand Army of the Republic. For several years he held the chair of instructor of anatomy in a Cleveland, O., medical college. He was the dean of the Marine Hospital Service, having associated himself with that service.

A New York Abortionist Trapped.—Dr. Francis Gray Blum was arrested recently in his sanitarium in New York City, charged with attempted abortion.

DR. C. A. MISENHEIMER,
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That the crude, resinous oils, which are now foistered upon the profession, may not be mistaken for our product (essence of the leaves of the plant), we state it is proved by tests made by medical clinics, that only products that are saturated with oxygen and freed of acids, resinous and other substances adherent to primary distillation, will develop the curative preperties possessed by the plant. These crude oils—now in use for mechanical purposes—are discernable by (1) their deficiency in pungent odor (which our product develops most freely through its surplus of oxygen); (2) their alcoholic, thin and mobile appearance, being reduced in specific density through the presence of acids; (3) their taste, the result of the counteracting tendency of resins and tannates.

To avoid the injurious consequences that result from substituting these crude commercial oils in croup, bronchitis, diphtheria, dysentery, internal inflammations, etc., we beg when prescribing to specify our product and to insist on getting it.

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Samples and literature gratis through Meyer, Bros. Drug Co., St. Louis, Mo.,

Dietetic Nuggets.—If all the maladies resulting from defective, excessive and badly regulated nutrition, and neglected hygiene could be eliminated from the world we should realize a pretty clean bill of health. Shotguns, suicide and accidents would have to be invoked in order to keep up the business of the cemeteries, the crematories and the sextons.

The former generations of physicians have been busy wrestling with the problem of "curing the sick." The coming medical man will probably bend his endeavors toward preventing disease. His chief reliance will undoubtedly be nutrition.

A majority of the human race either carelessly or ignorantly lose sight of the few really fundamental conditions of physical health. As they drift from nature they appeal to art. They subscribe for a "health" journal, buy somebody's "Domestic Practice of Medicine," stock their cupboards with "standard remedies" and much advertised noctrums, and then consider themselves competent to treat all ordinary diseases, both real and imaginary.

The old adage, "Let well enough alone," has lost caste. It is conservatism enthroned, inertia crystalized. Deference to it has always handicapped the progress of the race. To settle down to contentment with only well-enough things accomplished and well-enough things about you is physical, mental, moral and psychic surrender; it is vital, ethical and intellectual stagnation.

It is the ill-nourished and ill-fed who first succumb to any form of infection or epidemic. Your stall-fed ox is sleek as satin. It is the whey-fed calf that shivers when the first early frost falls on the grass, that has to be housed and coddled, and that is a dwarf, and a victim of vermin and scurvy. This is an important object lesson, and it leads

CATARACTS!

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Successfully used for removal of CAPSULAR and LENTICULAR CATARACTS, CORNEAL OPACITIES.

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Osmon Royal, M D., Portland Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy :

"Mrs C—, aged 73 The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr Osmon Royal, under date of June 4th 1903, writes :

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E V Colb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

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straight to a study of nutrition. The dominant question is a question of diet. In the ill-fed animal, human or dumb creature, the blood-stream is the first to go bankrupt, the first to show deprivation and depression. It famishes for want of Food.—*Dietetic and Hygienic Gazette.*

The Perils of Neglected Vaccination. —How the sin of neglected vaccination finds out its victims is shown by the medical inspector of the Chicago Health Department in his report on four cases of smallpox sent to the Isolation Hospital, quoted in the weekly bulletin of the department: "A man from Oswego, N. Y., visited friends upon his arrival in Chicago while he was in the early stage of smallpox. At the first house he visited there were two young ladies unvaccinated, though they are employed in a large downtown department store. Both are now in the hospital with smallpox, having contracted the disease from their Oswego friend. There was also an unvaccinated man at another house visited by this man, and he, too, is now in the hospital with smallpox. The fourth case, an unvaccinated young man, traveled on the same car with the Oswego man and visited in the same neighborhood."

It is said that a proposition has been submitted by a representative of Chicago University to found an association of endowed university medical schools, somewhat on the plan suggested by Dr. Barker some time ago. A meeting has been called in Washington next month, but only about half a dozen of the leading schools have been invited. It is understood that Johns Hopkins objects to this narrow limit.—*Journal of the American Medical Association.*

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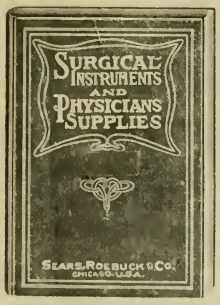
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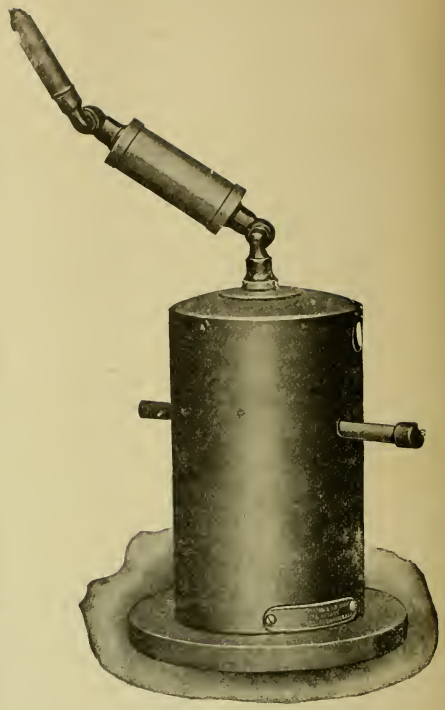
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Victims of the Jungle.—The Times, of London, states that in 1901 more human beings were killed by wild animals than in any year since 1875 except one, and reached a total of 3,651, while last year it was 2,836; and the number of deaths from snake bites was 23,166 Tigers killed 1,046 person, of whom 544 perished in Bengal, 65 being in a single district. This was due to the depredations of a man-eater, for the destruction of which a special reward was offered without avail. In another district, where 43 persons were killed, most of them fell victims also to a man-eater. Wolves slew 377 persons. Eleven thousand one hundred and thirty deaths took place in Bengal alone from snake bite, 3,258 of these being in the Patna division, while 5,110 deaths took place in the United Provinces; 80,796 cattle (an increase on the previous year) were killed by wild animals last year, and 9,019 by snakes. Tigers killed 30,555 of these, leopards 38,311, and wolves any hyenas most of the remainder.

The Tri-State Medical Association of North Carolina and Virginia will hold its annual meeting in Danville, Va., on February 23d. Special subject for discussion is "Amputation." Dr. R. E. Hughes, of Laurens, S. C., is secretary, and to him all titles of papers should be sent.

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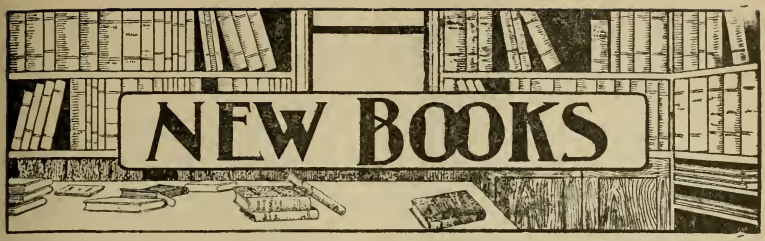
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Vol. IV, December, 1903, of Progressive Medicine, contains the following articles: "Diseases of the Digestive Tract and Allied Organs, the Liver, Pancreas and Peritoneum," by John C. Hemmeter; "Anaesthetics, Fractures, Dislocations, Amputations, Surgery of the Extremities and Orthopedics," by Joseph C. Bloodgood; "Genito-Urinary Diseases," by William T. Bellfield; "Diseases of the Kidneys," by John Rose Bradford; "Physiology," by Albert P. Bru aker; "Hygiene," by Chas. Harrington; and "Practical Therapeutic Referendum," by H. R. M. Landis. The respective papers of the various eminent writers are of the usual high merit and practical value and each brings its subject thoroughly up to date, and covers carefully recent progress. That by Prof. Hementer is to be especially commended to those interested in this field of medicine. There is so much of value that it would consume too much space to enter into special discussion of matter from the hands of the able list of contributors to this volume. Illustrations and cuts are in good tint and highly pleasing to even the critical reader. The medical profession would be very much benefitted could these volumes regularly come to every member of it.

The Treatment of Pneumonia.—K. von Ruck (*Jour. Tuberculosis,* April, 1903), reports a number of cases treated with large doses of creosote carbonate, while at the same time hot poultices of flaxseed were applied. From the experience afforded by these cases, he was greatly pleased with the results. In addition to the fact that the pneumonic area did not break down, as is so commonly experienced in the forms due to mixed infection, the creosotal treatment seemed to have an unmistakable influence on the fever, especially when large doses were given.

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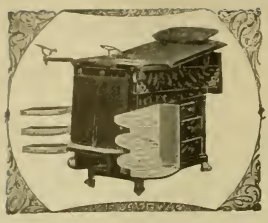
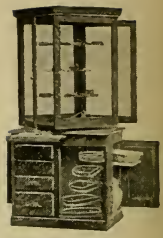
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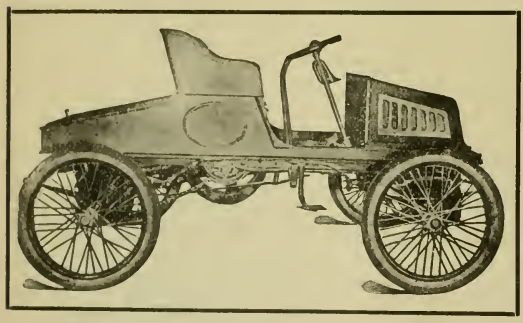
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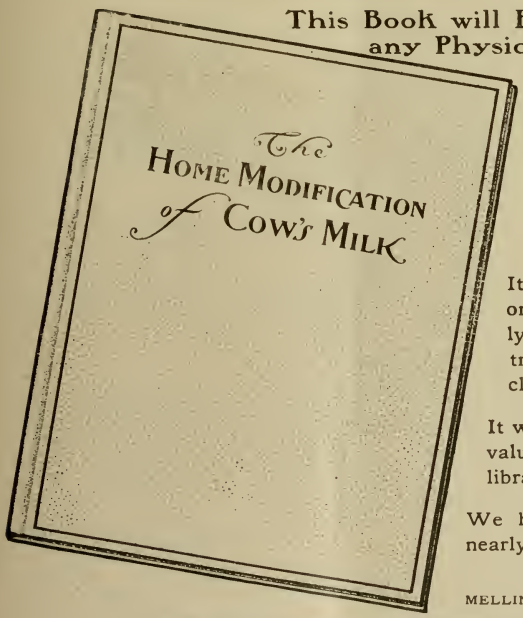
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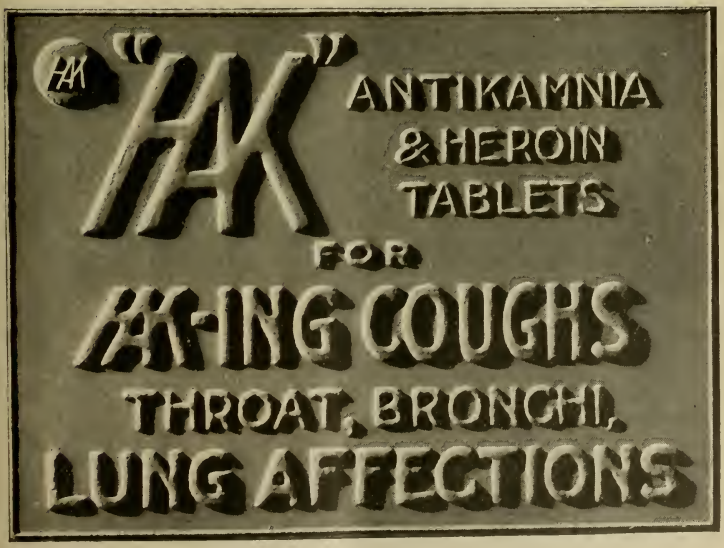
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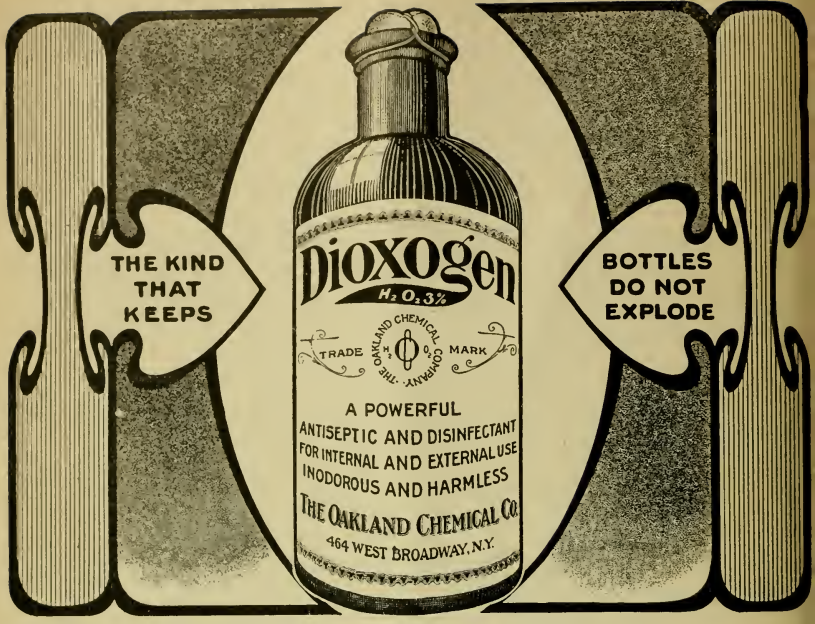
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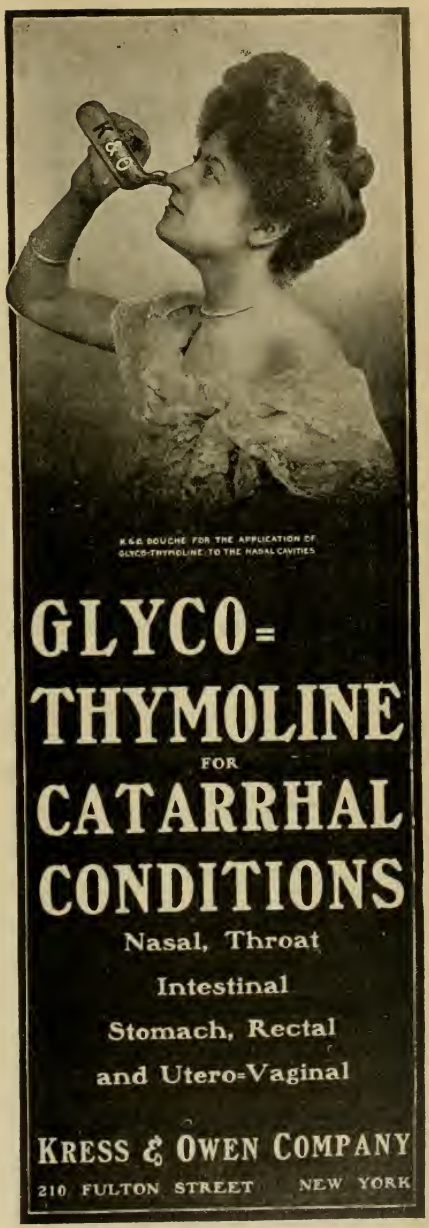
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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

The Microscope in General Practice.*

By Thomas R. Little, B. S , M. D., Greensboro, N. C.

In taking up this subject it is not only with the hope that those physicians who do not use the microscope may have their attention directed again to the great value of its application, but also that I may help to remove the obstacle which more than any other stands in the way of a more general resort to this accurate means of diagnosis, namely, the mistaken idea that its use implies great trouble, loss of time, much equipment and special training. Of the first three I shall have a word later on, but of the last I wish to speak right here. The special training falacy is a bug-a-boo which, I am suure, has deterred many a competent man from exerting his energies along this as along many other lines. To be brief, I am sure that any man graduated in the recent past from a well-equipped medical school has had opportunity to prepare himself sufficiently for effective work in this line. Even if he has not paid special attention to it while given opportunities which he did not properly appreciate—and who does so value these while they are with us?—a little "rubbing up" with the aid of a Mallory & Wright or Von Jasch will set aside the handicap.

So much by way of clearing the field. As to the benefits to be derived from persistent, conscientious, routine use of the microscope little need b said, for, admitting the feasibility and practicability of such use, there are few who do not realize to greater or less degree the advantage of the accurate knowledge so obtained—and for accuracy we are ever striving.

Even in cases apparently easy of diagnosis, how much more satisfaction we derive from the knowledge that we have exhausted all available means of confirmatory diagnosis and how much more competent we are to deal easily with complications which, without

*Read before the Forsyth County Medical Society.

such full investigation, might prove puzzling if not inexplicable, or we may discover unsuspected conditions, by prompt treatment of which we would ward off serious outbreaks later on. Take, for example, a patient suffering with one of the acute infectious fevers and the urine showing a trace of albumen. This might easily be attributed to the fever itself, whereas careful microscopic investigation might reveal the hyaline casts of a chronic interstitial nephritis and give us timely warning of danger ahead. Again, in obscure cases, upon which we may have exhausted unavailingly all our clinical knowledge and text-book prescriptions, after careful use of the microscope infinite relief often comes in a moment to us and later on possibly to the patient, provided we haven't waited too long.

Of this class I have lately been concerned in two cases, to which I shall refer when we take up the subject of examination of the urine.

Then, too, aside from the benefit to the patient and satisfaction to the physician derived from this line of work, there is another consideration point of which we cannot afford to lose sight entirely—the effect upon patient and family of this evidence of their physician's care and thoroughness. It is particularly in the tedious, obscure, chronic cases that the patient's confidence needs support, and conscientious investigation with the aid of every diagnostic device at our command will quiet his doubts and enlighten his doctor.

So much for generalizations. Now let us note some of the definite uses that may be made of a microscope by the general practitioner—and we will take up only the more familiar ones, those within the reach of almost every physician, for if unwilling to attempt the work himself, some fellow practitioner can be found to do it for him.

1st. The blood. Probably most common among blood tests is the Widal reaction. Though almost diagnostic when found (barring cases of previous attack) and of material assistance in many cases, there are several reasons why this test cannot be said to be of prime importance, these being, of course, the necessity for fresh culture, culture medium, uniform temperature and the fact that the test is not often obtained until the average physician has been able to make a definite diagnosis. Still in typical cases, and we know how numerous these are, the Widal often sets our minds at rest.

But there is one simple blood test that can be made quickly, easily and under almost any circumstances, that will repay one for all care and expense involved in microscopic work—the search for the plasmodium of malaria.

I am not sure that you of this county are so blessed as we are with the much talked-of third fever or X-fever, or whatever name you give it (though I am sure that it is no part of my purpose to discuss at all the pros and cons of the existence of such an entity), but it is especially in dealing with cases that seem to come under this class that our quest for the plasmodium is most richly rewarded. In a differential diagnosis between a disease that will certainly be cured by quinine, and a second disease and a third condition, either of which will be positively injured by such treatment, the microscope will play an important part.

In sections where all fevers can be strictly classed as either typhoid or malarial—and most writers claim that this is true of all fevers of the temperate zone of our country—we have at our command means of immediate diagnosis.

Again, in the various forms of anemia—as chlorosis, pernicious anemia,

leucocythemia and pdeudo-leukemia—a glance at a cover-slip of blood will tell much—a count will tell more—and this with the simple test for hemoglobin will give information that may save weeks of uncertainty, to say the least. Anemic conditions offer a broad field for mistakes—even simple everyday chlorosis sometimes leading us astray in our partiality to heart murmurs, dyspepsia, etc.; and other anemias send us chasing after gastric cancer or the overworked tape-worm.

In the differential diagnosis between acute appendicitis and typhoid fever—a diagnosis which we all know to be far from easy in some cases—a simple count of leucocytes, especially if repeated at regular short intervals, is often of the greatest value in deciding our line of action at a time when, on the one hand, delay may be disastrous, while on the other, unwarranted interference may be fatal.

I remember one such case particularly, a patient in the ward of a hospital in Philadelphia. Entered as medical case, diagnosis typhoid fever, and confirmed by one of the best clinicians on the staff. After some days, abdominal symptoms became so much more pronounced that the diagnosis of typhoid was no longer tenable. A member of the surgical staff was called, and all agreed that the case was one of appendicitis. Operation revealed a horrible condition of the abdominal cavity, and another was added to the long list of victims of the "stand-pat" policy. There was no count of the leucocytes in this case, and I am sure that such count at the time of admission five days before that of operation would have aroused suspicion that should have saved the patient's life.

As a practical bacteriologist one soon learns to turn to his microscope as his surest stay. One of the most frequent calls for its use is in deciding suspicious plumonary troubles.

An early absolute diagnosis is to many sufferers more than half the fight, and even to those who cannot go to a favorable climate, it offers much under properly applied methods of treatment and rules of hygiene.

Not long since a fellow practitioner referred to me a specimen of sputum from an obscure case—so obscure that another physician who had been in attendance was reported by the patent's husband as having offered to "eat all the consumption in that case." In about five minutes we were absolutely sure of his mistake, but generously refrained from holding him to his word.

Of those cases discovered early and benefited by home treatment a striking case has recently come under my observation. In August, 1903, I was called to examine the sputum of a patient living in the mountains of western North Carolina. I found it swarming with tubercle bacilli. I was then given the history of the case, which I give below, and was consulted as to treatment. Patient was woman of 65. No tuberculosis in family history except one sister died of it several years ago at age about same as that of patient, and during her illness was closely associated with the patient. For some months patient had had troublesome cough; began to lose weight gradually, and, though her condition was not viewed with alarm, her physician advised an examination of the sputum with result stated. Taking into consideration the patient's age, the fact that her home was in a fairly favorable locality, and above all, that she had been away from home and family but little, and was so wrapped up in these that a half day's absence from them was almost unendurable, we concluded that sending her to a better climate would be more in-

jurious than the disease from which she suffered.

Accordingly, I suggested the use of a simple "home-made" inhaler, which I have found markedly beneficial, together with the usual measures of hygiene and tonic treatment, omitting all stomach disturbers.

The solution used in the inhaler was of one-third formalin and two-thirds absolute alcocol, and the patient was directed to use it fifteen minutes every two hours.

After one month sputum showed marked decrease in number of bacilli and patient reported gain of six pounds in weight, little trouble from cough, with little expectoration, and said she felt well. After another month it was difficult to find a tubercle, and the improvement has continued until the patient is apparently well.

Another helpful examination (and this requires even less time) is that for the gonococcus. It is well for the physician to be absolutely sure of his diagnosis before beginning treatment in an atypical case, which may be only a non-specific urethritis, a condition met much more frequently than many suppose, and in which treatment is often harmful.

We can easily see what it might mean to a patient, though I must admit that in the vast majority of cases his only satisfaction will be that of a positive diagnosis.

Cases of obscure origin or history furnish further material. A few months since a lady brought her three-year-old girl into my office on account of a discharge from the region of the vulva which the child had had for some days, accompanied by burning and itching. After inquiry into the history as to thread-worm, etc., examination showed a thin whitish discharge from the vagina and labia, and the microscope revealed typical gonococci. Aside from the inflammation the parts were normal, so in the absence of any history of like trouble among the others of the household, we have left only the soiled rag theory—a neighbor's rag, of course.

Who is it that now denies the efficacy of the diphtheria antitoxin when given early? And of course the words "when given early" are most significant. And how can we best decide early whether we should put the family to the extra expense and the little patient to the additional torture, for such it is, though largely mental, yet none the less severe? Surely this use of the microscope needs no further words. We have already referred to the widal reaction.

Probably the most generally practicable and certainly one of the most fruitful fields for the microscope is that of the urine.

Obscure cases with symptoms violent and alarming enough, but apparently not referable to any definite organic lesion, even when a more or less perfunctory chemical examination of the urine has been made—and too often this is omitted—becomes clear at once. Four such cases, all presenting the same general features, have come under my observation in the last six months. Of these I shall refer briefly to two, one of which resulted fatally; the others, discovered in time, thanks to earlier investigation, ran favorable courses to recovery. Patient had been sick for several weeks, symptoms at outset simulating those of typhoid fever until fever disappeared and gave place to subnormal temperature and practically no symptoms except those of exceedingly irritable and unretentive stomach. It was after this condition had existed for some days that I first examined the patient and suggested a thorough investigation of the urine. This showed quantities of pus

and blood and epithelial cells from the renal pelvis and from the kidney proper Of course there was albumen. On inquiry I found that the total for preceding twenty-four hours was 1½ ozs., obtained by catheterization. Even in this case, energetic treatment produced some improvement, but it proved evanescent, and the patient died two days later. As I said, the other cases, showing similar characteristics, were investigated earlier and responded readily to treatment. One of these was a pyelonephritis following a severe attack of typhoid fever, and at first thought to be an unaccountable relapse.

Where traces of albumen are found we are aided in our search for the cause by an examination for casts or for pus or blood. Epitheleal cells of various kinds enable us to locate the lesion accurately and to direct treatment to the kidneys, bladder or uretha, as the case may be.

A few weeks since a microscopic examination of the urine aided me in a rather unexpected way. Examining that of a patient preparatory to a laparotomy, I founud it normal chemically, but on the slide it showed quantities of bladder epithelium. In the absence of any bladder symptoms, I came to the conclusion that some portion of the bladder was sacculated and not emptied completely when urine was voided. Judging from the position and shape of the tumor for removal of which operation was about to be done, I expected to find this sacculation just above and in front of the tumor, and immediately in the line of the incision. Such proved to be the case—the peritoneum being adherent to the bladder—and after incision was made four ounces of urine were withdrawn by means of a long catheter, although an ordinary catheter had been carefully passed twice just before the patient was put on the table. Of course some such condition was to be expected, but the warning of those epithelial cells aided me in avoiding a serious accident.

The instances which I have pointed out are of course only some of the most practical and easily executed uses of a microscope.

Now, as to the plea of cost of time and trouble and of equipment. As a matter of fact, the time consumed in almost any of these examinations is trifling, a thing of a few minutes, and the trouble directly proportionate.

Equipment means, first, a microscope; $100 will buy an excellent one, and I consider that the best investment I ever made of such amount. Second, haemocytometer for counting red and white corpuscles, $15. Third, haemoglobinometer; $1.50 will buy Tallquist's scale, which gives results as accurate as most of the more expensive instruments, with no trouble. Fourth, half dozen stains, all amounting to about $1.50; this for 30 c. c. bottles, which will last for months. Fifth, cover glasses, slides, etc., at say $3, including a few necessary fixtures.

If desired a centrifuge can be added at a cost of $6.75. Of course one can add to this list almost ad infinitum, but we are figuring now on what he must have in order to get good results. For $125 or $130 then one can fit up a little laboratory for satisfactory practical work, and I can assure such a one that his investment will yield a handsome profit.

Intestinal Obstruction From Meckel's Diverticulum.*

By Stuart McGuire, M. D., Surgeon in Charge St. Luke's Hospital, Richmond, Va.

Whether admitted or not, there is undoubtedly a general belief among surgeons that cases occur in groups, and I confess the superstition has been brought home to me by three cases of intestinal obstruction, due to Meckel's Diverticulum, that have recently occurred in my practice. The symptoms, pathologic conditions and final results were so similar in all that it is unnecessary to give separate history of each. All were men between twenty and thirty years of age; all were taken with sudden abdominal pain, followed by obstruction, distention and peritonitis; all were brought to the hospital practically moribund from sepsis; all were diagnosticated as fulminating appendicitis; all were operated upon, and all died.

In each case, when the abdomen was opened, there was the escape of a quart or more of bloody serum. In each the bowels were inflamed and distended with gas, and in each a gangrenous diverticulum was found, originating from the ileum, extending upward and inward to be attached by its tip to the mesentery, and having beneath it an incarcerated coil of small intestine. The specimen I exhibit was removed from the last case. It is seven inches in length, one inch in its smallest diameter and is expanded at its tip into a sacculated cavity.

The rapidity with which a strangulated diverticulum kills, and the necessity of surgical intervention even more prompt than in appendicitis, has led me to study the available literature on the subject and to report the rather unsatisfactory result.

In early fetal development the intestinal canal communicates with the vitelline sac by means of the vitelline or omphalo-mesenteric duct. This duct begins at the lower part of the ileum and passed through the abdominal wall at the site of the future umbilicus. It usually becomes obliterated at the end of the sixth week. If it does not undergo atrophy a diverticulum results, shaped like a glove finger, with its base opening into the bowel and its tip either floating free in the abdominal cavity, or attached by a fibrous cord to the umbilicus. Meckel's diverticulum varies in length from one to ten inches, and in diameter from a scarcely permeable tube to a protrusion the calibre of the small intestine. It is usually cylindrical in shape, but may be sacculated or expanded into cavities. The distal extremity may be smooth and tapering, or it may be rough and bulbous. It is usually located about three feet above the ileo cecal valve on the convex side of the intestine opposite the insertion of its mesentery.

If free, the distal end may become adherent to any place within the abdominal cavity its length permits it to reach. Its most frequent point of attachment is the mesentery, although a case is reported where it was fastened to the bladder.

When Meckel's Diverticulum is connected with the umbilicus by a fibrous cord, it may cause intestinal obstruction by a loop of bowel becoming twisted around it. When it floats free in the abdominal cavity, it may cause obstruction either by encircling a bowel and becoming mechanically locked by its club-shaped extremity, or by the free end becoming attached to a fixed point by inflammatory adhesions and a loop of intestines being caught beneath it.

*Paper read at meeting of the Richmond Academy of Medicine and Surgery, January 12, 1904.

Meckel's diverticulum is said to exist in about 2 per cent. of all bodies examined. I have accidentally observed its presence several times while operating for other abdominal troubles. As the victim of the abnormality usually goes through life unconscious of its existence, and as only a small per cent. have intestinal obstruction, the number of cases reported is not large.

The symptoms due to strangulation by the diverticulum are sudden in onset. Pain is severe and persistent and referred chiefly to the region of the umbilicus. Vomiting appears early and may become stercoraceous; tenesmus and discharge of blood from the rectum are absent; constipation is, as a rule, absolute; the abdominal wall is not rigid, but later becomes tense from distension; fever and the attending symptoms of sepsis begin with the development of peritonitis, and sometimes there is tenderness or a perceptible swelling near the umbilicus.



All writers admit that it is impossible to make a positive diagnosis in a case of intestinal obstruction due to the diverticulum, or to differentiate it from intestinal paresis, due to peritonitis of appendicular origin, hence the importance of early operative intervention in doubtful cases.

Oschner's method of treatment of peritonitis, while valuable in appendicitis, would prove uniformly fatal in mechanical obstruction. The abdomen should be opened in the middle line and the lower right quadrant first examined. If there is a large quantity of bloody serum free from the admixture of pus, a strangulated diverticulum will most likely be found. As soon as it is located the tip should be separated from the tissue to which it has become adherent and the obstruction relieved. The patency of the bowel should then be demonstrated and its walls carefully examined to see if they are damaged sufficiently to necessitate resection. Finally the diverticulum should be removed. If it is small it may be tied and amputated like an appendix, the stump being buried or covered with peritoneum. If it is large it would be unsafe to trust to a ligature as it might cut

through and cause death from peritonitis at a time when the patient was regarded as out of danger. If the size of the diverticulum approaches that of the ileum from which it originates, it should be amputated and the opening closed with the same care and by the same methods as an intestinal wound of the same size from other causes.

Gonorrhoea: Its Relation to Marriage.*

By J. A. Childs, M. D., Hickory, N. C.

The old idea that gonorrhœa is "no more serious than a common cold," has given place to a more correct view of the subject, and we of today, who have studied the disease, realize that it is one of the most difficult to cure, and that there is probably no other disease that is so disastrous to the health and happiness of the human race, or whose sequelae cause so great suffering as a gonorrhœal inflammation of the male urethra. Having had a wide experience in the treatment of this disease, and been a close observer of the dire results which follow in its wake, I am sorry to be compelled to say that the very great majority of physicians do not seem to realize its seriousness or else shirk their responsibility both in the treatment and the prevention of the disease.

While in the male the disease is rarely directly fatal, still even here the complications and sequelae are of exceedingly serious nature, and often prove fatal. It is probably true that urethritis is the starting point for many more cases of invalidism and death than syphilis, and still the public has been taught by our profession to consider gonorrhœa a very simple and harmless disease.

Lawson Tait says: "Early in life I heard an eminent surgeon say that if he was doomed to venereal disease he would rather have syphilis than gonorrhœa." I marveled and disbelieved, but now I know that if he included women in his thoughts, he spoke truly.

When syphilis kills ten, gonorrhœa kills its thousands, and it would take the suffering of one hundred cases of syphilis to make up for the long, weary years of agony of one case of gonorrhœal pyosalpinx."

Dr. J. B. S. Holmes, of Atlanta, writes: "There is no disease that affects women that should engage the serious and thoughtful consideration of the physician more than gonorrhœa, the deadliest of all enemies to female health."

In a paper read at the meeting of the Southern Surgical and Gynecological Association in 1902, on the curse of gonorrhœa, Dr. Joseph Taber Johnson says: "The evidence is indisputable and overwhelmingly that many women lose their lives annually from the pelvic inflammation caused by these complications, and that thousands probably lose their health, or their powers of conception from the same cause."

Thirty years ago Noeggerath first called the attention of the profession to the fearful ravages this disease was making upon our women. He was a pioneer in this field, and although his theories were at one time ridiculed, today his teachings are widely, almost universally accepted. He says: "I do not know what the state of matters in other cities is; I did not know how we stood in New York until I questioned the husband of every woman who came under treatment, but I believe we may apply here the dictum of Ricord, that 800 men in 1,000 have had gonorrhœa."

He says further: "I believe I do not exaggerate when I say that gonorrhœa

*Read before the Catawba County Medical Society, December 8, 1903.

in 90 per cent. of cases remains uncured. Of every hundred women who have married men formerly affected by gonorrhœa, hardly ten remain well, the others are afflicted by some of the ailments which I have attempted to describe."

G. Frank Lydston, of Chicago, says: "The more carefully we study pelvic diseases in women, the narrower their etiological field becomes, and the more frequently they are found to be dependent upon gonorrhœoa. Thus, when freed from pathologic and anatomic errors, pelvic inflammations are found to be dependent in the majority of cases, if not all, upon tubal disease, and tubal disease is unquestionably almost always due to gonorrhœa and its congeners or derivatives."

Joseph Price says: "That in over one thousand sections for pelvic suppuration, 90 per cent. were traceable to gonorrhœal infection, and that 90 per cent. of these histories are reliable and clear."

Wathen says: "Nearly all who have not born children." Frederick and Pozzi estimate 75 per cent.

"Why do large numbers of apparently healthy women date their pelvic infection from the marriage week?"

Is it, as one author declares, the fatigue and excitement of the wedding journey? Why do so many women, with perfectly developed reproduction organs, remain sterile from the time of marriage, or after the birth of a single child, and a dangerous chilbed fever? The causation of too many such cases of hopelessly diseased uteri, tubes and ovaries, not to mention proctitis, with sometimes rectal stricture, urethritis, cystitis, pyelitis, and nephritis has been explained by the word "idiopathic."

Their histories, if written, would often tell of an apparently cured gonorrhœa before or after marriage in the husband. If the most destructive infection may follow contact with a subject of gonorrhœa after the discharge has ceased, how perilous must be the slight gleety discharge so often disregarded."

Under the head of "Etiology in General," Garrigues says: "Greater than any other danger is, however, sexual intercourse with a man who has gonorrhœa or who has perhaps, had one many years ago which has not been thoroughly cured.

"Under the name of latent gonorrhœa has been described a condition in which a woman is infected by a man who had gonorrhœa months or years before. No acute gonorrhœa is produced, but the woman becomes ailing, remains sterile, and is affected with chronic, sub-acute, sometimes acute, often relapsing inflammation of the internal genitals."

But women are not the only innocent sufferers from gonorrhœa, for another large class is composed of helpless infants and children.

Fuchs, of Germany, has made exhaustive researches in Europe as to the cause of blindness, and found the ratio was 23.5 per cent. among the young from this cause alone. The matter was investigated in New York State by Lucien Howe. He says: "On an average, it might be stated with a considerable degree of accuracy, that at 18½ to 19 per cent. of all the blind in early life are in this condition from ophthalmia neonatorum."

Dr. Tyner, now of Washington, at one time had charge of a state institution for the blind in Texas, and had under his care 1,700 cases of blindness. He stated to Dr. Joseph T. Johnson that 6 per cent. of these had their eyes destroyed by gonorrhœal ophthalmia among the white patients, and 18.7 per cent. of the colored children were blind from the same cause.

In our opinion every physician should carry in his obstetrical bag a box of pure boric acid, and before the birth of every child have made a saturate solution of same in serile water, and as soon as the child is born, have the eyes thoroughly cleansed with this solution. In this way many cases of blindness and much suffering may be avoided.

The question arises, what can we do to prevent or, at least, lessen the ravages of this disease? Can we cure our cases of gonorrhœa in the male? I answer unhesitatingly that in nearly all cases we can, if the patient will follow instruction and submit to the necessary treatment, surgical or medical.

In a report of the committee from the American Medical Association, it is stated by Lydston that gonorrhœa is curable "in the majority of cases." Chismore Fuller, Verhoogen, "in the great majority."

Andry: "If the physician attends to it diligently and the patient is willing to care for himself as required, and for as long a time as necessary."

Feleki says: "Only a small percentage must in consequence of the uncertainty of the duration of their infectiousness, or in consequence of serious complications, be looked upon as incurable. I estimate this proportion as about 3 per cent."

We cannot discuss the treatment of the disease in this paper, but we will say that the majority of physicians treat this disease *by letting the patient treat himself,* never making an examination to ascertain the extent of urethra involved, or what anatomic changes have taken place, such as stricture, fistula, abscess, cowperitis, prostatitis, vesiculitis, etc., and it is small wonder that so many cases go uncured and marrying, wreck the health and happiness of the women they should honor and protect.

During the year 1900 and 1901, Drs. Childs and Champion, of Atlanta, examined microscopically, the discharge from the urethra of about 230 men, more than half chronic cases, and some of many years' standing. (One man aged 51 said he contracted the disease when 21, and had never been cured.) In only 2 per cent. did we fail to find gonococci present. That is, when there is a discharge of pus, or muco-pus from the urethra, 98 per cent. upon careful examination will be found to be infectious. Of this number, 43 were married men, living with their wives, and 21 voluntarily stated that their wives were in bad health and were under treatment for some female disease.

Of the other 22, no statement was made and no questions asked as to the health of their wives. It is a well known fact that a large proportion of married men who come for treatment of urethral disease, state that their wives are invalids, and try to excuse their sins on account of the wrecked health of wives, for which the husbands alone are responsible.

That something should be done to check the ravages of this disease, we are ready to admit, and in our opinion the only feasible way is through the medical profession. Let every physician who treats this disease impress upon his patient the importance of a thorough cure before he contemplates marriage, and let us absolutely refuse to give our consent to his marriage until he is free from all such symptoms as too frequent urination, getting up at nights to urinate, pain in urethra, or bladder; when the urethra is free from stricture, the prostate is not sensitive or enlarged; when the seminal vesicles are normal, the urine free from "clap-shreds," and after repeated examinations the gonococcus is not found. And even then we will sometimes make mistakes.

Let our colleges impress upon the students the seriousness of this disease. Let us strive as diligently in preventing this disease as we do smallpox, or yellow fever, or other preventable disease and much may be done to reduce its frequency, but as Konig says, "No doubt it will always be impossible to get rid of the disease entirely, but if it were generally known how serious may be the consequences, the number of infections would no doubt be much less.

The education of the public in this respect is chiefly in the hands of the medical profession. Have we been doing our duty in this respect?"

Some Mistakes of a Country Doctor.

By One of Them—Fourth Paper.

Most of the mistakes of which I have written were committed in my early professional life, but not all can be attributed to the inexperience of youth, for some of them have occurred of late years and since I have grown gray in practice—more's the pity that it is so. Age may give experience and by application knowledge can be gained, but age, experience and knowledge combined do not make one infallible. With a heavy head—and the experience gained by thirty years of practice, and the information gathered from many books, I still occasionally blunder in my work.

The disregard of idosyncrasies of patients has often caused me trouble similar to, and almost as great as, those of errors in diagnosis. I had heard Mr. A say that he could not take quinine, and when called to see him in a malarial attack, he reiterated this statement. Several days' treatment failed to relieve him. Knowing he would recognize the quinine in powder, I gave him powders of Cinchona bark. In one hour after the first dose was taken (5 grains) he was in one of the hardest chills I ever saw any one have. He was a very large man, weighing 250 pounds or more and not only shook the bed on which he was lying, but the house, a 6-roomed cottage, was made to tremble, and it was three days before he recovered from its effect.

One year later he took a dose of a tonic prepared for someone else which contained one grain of quinine to the dose. In thirty minutes he was in a chill, and was sick for several days.

Mrs. W., a visitor in my neighborhood, first pregnancy, was threatened with an abortion at four months. She was the daughter of a physician, had taken a course in nursing, and read some medicine. She was very intelligent and well informed. On examination I thought the abortion might be averted by opiates, and suggested a hypodermic, when she said it was out of the question for her to use opiates in any form. Several hours' treatment failing to give more than temporary relief, and knowing that many cases are unpleasantly affected by small doses, and not so by larger ones, I administered, unknown to her, a teaspoonful—over a drachm—of deodorized tr. of opium. It checked the abortion but my patient had several rigors, followed by severe nausea and vomiting for 48 hours. I treated this patient for a month, and no medicine administered had the desired effect and many had very unpleasant and deleterious ones. Some had an opposite effect from the usual course, as for instance, Fl. Ex. Ergot allayed instead of increasing uterine contractions. During the month she was under my care she was troubled with an incessant vomiting, almost pernicious or having slight uterine pains—never 24 hours without one of these troubles. She gave her father's statement that all hypnotics and anodynes affected her unpleasantly. She passed from under my

care before confinement.

Mr. H., a carpenter's laborer, of strong, robust constitution, received an injury late in the afternoon by falling through the sleepers of an unfinished building, catching on his hands and abdomen. His hands, arms and shoulders were strained, and no inconvenience was felt at the time in the abdomen. He finished the day's work, and passed a comparatively easy night, but found his abdomen swollen and tender on awakening in the morning. I saw him during the day, found abdomen much swollen and very tender. Some fever, bowels moved with pain, and urine scanty and high colored. I diagnosed traumatic peritonitis, for which I treated him for 24 hours. Some complaint on having to move in order to relieve his bladder, which was necessary quite often, induced me to pass a catherter. A very large quantity of urine was drawn, and in two hours all symptoms of peritonitis had disappeared. The blow had partially paralyzed the walls of the bladder, and the extra distension, and soreness of the abdominal walls had masked the real trouble.

Mr. R., unmarried, 40 years of age, was a man of exceptionable character, steady in his habits and upright in all his dealings. He had been traveling for a month in very hard winter weather through the country by private conveyance, being much exposed, taking no rest and but little care of his health. I was asked by a relative to see him after he had been in bed two days. He was disposed to be morose at first and afterwards very vivacious. Not much history of illness, except great insomnia. Considered, we sometimes say, for want of a better term, that he was "full of cold," and generally run down. I saw him every day for three or four days without improvement in his condition, and knew there must be something in the case I had not fully grasped. I was called after midnight of the fourth day of attendance. He had not slept any and the attendant, a negro field hand, said he had been delirious part of the time. Heart, lungs, stomache, bowels, liver, kidneys, all semed to be normal. I was not satisfied with his mental and nervous state, and so remained with him several hours, finally securing for him three or four hours sleep. During the next day I was called hastily, to find all the male members of the family away, and the women and children of the household locked up in a side room of the house, through the window of which I was invited to enter. Here I learned that some time before the patient had driven off his attendant and come downstaris half dressed, a pistol in one hand and a rifle in the other, demanding more firearms He was now in the parlor, half dressed, without fire (temperature 28 degrees), with two guns, a pistol and an axe, swearing he would kill the first one to enter the house. Believing that he would recognize my voice as that of a friend, I stepped into the hall and called to him, when he asked me to come quickly. On entering the room he thrust a double-barrelled shot gun into my hands and asked me to stand by him. His next remark about little devils running over the picture frames and piano, the wild look in his eyes, and the odor of his breath told me unmistakably of delirium tremens. He was disarmed by strategy, and put to bed. A search found several—six I think, quart bottles hid in various parts of his room, one only full of whiskey, one or two empty, the others partially full. That he ever indulged in strong drink was unknown and unsuspected by his best friends. It afterwards developed that he knew nothing of the last week of

his trip, before his illness, yet he had managed to drink heavily without detection after being confined to his room.

This debauch was followed by a severe illness from which he made a slow recovery.

The treating of symptoms without making a diagnosis is not good practice. It is not always possible to make a diagnosis in the early stages of a disease, or on the first examination, and the treatment under such conditions must be expectant and possibly palliative. Errors committed in these cases should not be classed as mistakes in practice, though future developments in the disease show that we were wide of the mark in our first prescriptions.

Of these I have had my share, notable in the case of fevers, principally malarial, typhoid and typho-malarial—or should I say the so-called typho-malarials? I used to have trouble diagnosing this disease, and now when I am told that there is no such disease as typho-malaria, I have still more trouble with that class of fevers presenting symptoms of both typhoid and malarial fevers, that is, when I try to name it, I am told if quinine does not relieve it in so many hours the fever is typhoid. This may do for the hospital physician, the laboratory worker, or the scientific writer, but the practitioner on the lowlands near the coast from Virginia to Texas can tell of many cases that do not yield so readily to quinine. If all the cases that do not yield to quinine are to be called typhoid, I can show a fine record, both as to percentage of cures, and duration of fever. I might write more of this, and the difficulties under which the country doctor labors in making the nicer distinctions of differential diagnosis, but it is all foreign to my subject.

Many others might be mentioned in this class, as the diseases of the lungs, some presenting a diarrhoea as the most prominent symptom, and others with only a headache to direct in making a diagnosis. In the exanthematous diseases, it is almost impossible to form a correct opinion before the eruption. In all of these I have committed errors in announcing an opinion, and in the treatment instituted.

This paper closes the series, not for want of material, but because there has been enough given—perhaps too many already—adding another to my already large list of errors. I have refrained from alluding to the mistakes of others; I have seen them in the work of my professional brethren both in country and town doctors. I have seen it, too, in the public, especially when I was fresh from college, and the public failed to give me a chance to show how much I did know. I have realized, too, how great a mistake had been made in calling me where another doctor ought to have been called, and the serious blunder the public makes in not remunerating the doctor for services rendered is ever present with me. But of these I may not write. What I have written has given me both pain and pleasure, and I now repeat what I have already said in one of the papers, that I hope some one may be enabled, by my experience, to avoid the mistakes I have made.

ABSTRACTS.

Obstetrical Advice.

T. J. Shoemaker read before the Kentucky Medical Society in April last a paper (*American Practitioner and News*) on "Some Things the Obstetrician May do to Assist the Lying-in Woman, and Some things He had Better Not Do." The paper is written in a pleasant epistolary form, and advises that after pleasant greetings to the patient and those present, the hands and beard of the doctor, if he wears one, should be rendered aseptic. Permission to make an examination should be requested in order to ascertain her condition, and this should be done as gently as possible. A well educated index finger will tell much to the doctor as to the position of uterus and the condition of the os. If the pains are severe and the os uteri is turned back, they will never do any good until the accouchier brings the os uteri down and holds it in position—not always an easy job. If unable to reach the os with index finger, turn your patient on her left side, press the uterine tumor down with left hand and try to reach the os with index finger of right hand. When once secured hold it in position until the pains have dilated the os so that labor will go on in regular manner. If pains are weak and slow, they may sometimes be increased by titillating the os in a circular manner, or by stretching the os with two fingers, or by pressing on the perineum with index finger. Chloroform to take off the rough edges of the cutting, grinding pains requires discretion for its use, and may some times stop labor entirely.

"There is one thing I would warn the young accoucheur against; when you have a primipara case of labor and the pains are going on lovely and the os uteri is not only dilatable but dilated well, and the bag of waters well formed, and you feel like you are going to have a chance once more to be free and sit beside your best girl in the near future, and pour into her ear tales of love, or if you are just married that you will soon be by the side of your darling little wife, do not in your anxiety be tempted to rupture the fetal membranes. If you should become so unguarded at an evil moment you will have, I fear, many hours to regret it. The pains will stop suddenly, everything will come to a standstill, you will think about your past troubles and your sins and dead relatives that were once so dear to you; you will think your past troubles were small compared with how foolishly you have just acted. Your fondest hopes have all departed and blasted, and you are doomed to sit like a condemned criminal until nature may, after a long time, return to action for your relief. The accoucheur had better wait and permit the baby to be born with a veil over its face than to do such a rash thing. Let the bag of waters help the labor as long as it will hold on."

In mutipara the waters can sometimes be ruptured with advantages and if pains cease ergot may be given, though not more than two doses for fear of injury to child. Ergot should be given just before delivery in all tedious labors to prevent postpartum hemorrhage. Be sure to see that placenta and membranes are entire, all blood clots are removed, and keep the hand on womb until it is securely contracted. Support the perineum by pressure against the head to prevent too rapid advancement, and do not encourage the patient to bear down until the perineum is sufficiently stretched. If your patient gets tired of your efforts to aid her, as some will, let her alone awhile

unless the condition demands attention. Chloroform sometimes stops all pains, and has to be abandoned altogether, and its long continued use though, the author believes, may cause post-partum hemorrhage.

Contrary to the advice generally given in the text books and professors in their lectures, the placenta should be delivered at once, as it is much easier accomplished then than later. If placenta retained, administer chloroform and introduce the hand and remove it.

Stomach Lavage Without the Tube.

In catarrh of the stomach with dilitation, N. R. Gordon (*Alkaloid Clinic*) says that there is a bagging of the stomach downwards so that there is a pocket below the pyloris, and it is impossible for the organ to expel its contents without aid. There is always a residue of the contents of the viscus that is in a fermentative process. It requires to be removed and the stomach washed out. To meet the indications he advises the following procedure:

"Soon after rising in the morning the patient should sip a pint of warm water containing sufficient salt to give it an agreeable taste; then lie down on the back and turn from side to side rapidly ten of fifteen times; then turn on left side and draw up knees slightly, then a voluntary contraction on the diaphragm and abdominal recti muscles, the stomach can be made to move up and down, that is from sternum to umbilicus, a kind of shaking process. Repeat this from ten to fifteen times, allowing intervals of repose of a few minutes between every three or four contractions, then turn to right side, repeating the same operation. Remain resting on the right side from forty to sixty minutes, by this time the entire contents of the stomachs will have passed out through the pyloris into the duodneum." This will cure many cases of dyspepsia if a little care is exercised as to diet, and never eat till hungry.

Antiseptics in Typhoid Fever.

Peck (*Therp. Gaz.*) strongly advocates the use of antiseptics in the treatment of typhoid fever. It is wise to assume that there is internal sepsis in every case of typhoid fever, through some authorities claim otherwise, and direct the treatment on that basis. Two plans or treating typhoid fever are in vogue—one is take care of the patient while he fights with the disease and the other is take care of the patient and at the same time make war on the enemy. The use of non-toxic agents that will destroy or weaken the force of the germ is indicated as belonging to the latter. Of these agents there are many, sulpho carbonate of zinc, urotropin, guiacol, preparations of mercury, salol—but the most satisfactory intestinal antiseptics are chlorine and acetozone. Urotropine is especially useful in clearing the urine of bacilli. The author arrives at the following conclusions: Antiseptics should be used in treating typhoid fever because they increase the chances of recovery, they shorten the course of the disease, they render the patient more comfortable, they simplify and lighten the work of the nurse, and they decrease the number of bacilli in the stools and urine, which would be liable to contaminate the water supply and spread the disease.

Chronic Cystitis.

Kalterheny (*Medical Brief*) claims excess of uric acid as a frequent cause of chronic cystitis. Any pathological factor or conditions which will cause hyperemia or congestion of the vesical mucus membrane, may cause

cystitis. Bacteria contained in the decomposing residual urine is a prolific cause of inflammatory action, and many other causes are enumerated. In over two hundred cases of cystitis treated, chemical and microscopical examinations of the urine were made an excess of uric acid was found in 50 per cent.

Tetanus and Vaccine Virus.

Huddleson (*Medicine*) has made a study of this subject, and written of it after experiments as to the association of two germs. The epidemic of tetanus following vaccination in 1891, while not fully demonstrating the existence of a mixed or combined infection, shows the possibility of its occurrence.

Calves furnished the vaccine laboratory of the New York City Health Department are old enough to have been fed hay before reception, and consequently may have been infected with tetanus on reception. Twenty-five of these calves were used for the experiments which were thorough and conclusions reached as follows:

1. The feces of calves fed on hay may contain tetanus germs.

2. Tetanus germs do not develop in glycerinated virus.

3. If any form of vaccine virus, either dry points or tubes of glycerinated virus, is infected with tetanus, it may convey it.

4. Small amounts of the teanus infection easily fail to demonstrate both by animal and by cultural tests.

5. If tetanus germs are applied in quantity to the inoculated areas of a calf at any time during the period of vaccine production the tetanus may be present in the vaccine virus collected.

6. Inoculation by sacrification is a possible method of inducing tetanus in susceptible animals.

7. It is probable that precaution against the issue of infected vaccine virus consists less in tests of the virus than in care taken during production, and especially in the clealiness of the methods in use in the stable and in the laboratory.

Infantile Colic.

McAlister (*Pediatrics*, October, 1903) gives as exciting causes of infantile colic indulgence of the mother in rest, in insufficient exercise, irregularity of diet and the mental state. In bottle fed babies the want of strict cleanliness in their care, overfeeding and too rapid feeding, the last being a very prolific cause. Too long use of nipples cause them to become patulous and the flow is too free. Diagnosis of colic is important. All crying of babies is not from colic. Colic presents hardness of abdomen, palpitation shows coils in intestine—drawing up of legs is present, and there is expulsion of flatus with vigorous crying. Great circumspection should be exercised in the use of drugs. Opiates are condemened. Encourage expulsion of platus by manipulation of abdomen, massage and warmth to bowels. High acidity of bottle-fed infants has suggested the combination of alkaline preparations with carrainatives, as in the following:

℞

Sodii Bi Carb.	gr. 40
Spts Amon. Aromat.	m. 40
Glycerine	m. 30
Aqua Menth Pip.	q. s. ℥ 2 m

S.: Teaspoonful between feedings.

To get Rid of Bad Teeth.

Price (*Medical Council*) advises that the cavity be thoroughly dried out and a paste made of equal parts of arsenic and iodoform in a 5 per cent. solution of carbolic acid—be carried into the cavity on a pledget of cotton and covered with cotton dipped in sandurae

varnish. The anesthetic properties of the iodoform prevent the intolerable suffering caused by arsenic when used alone. He claims that no ill effects follow the use of the arsenic for this purpose.

Adrenalin Internally.

Dupuy (*Therp. Gaz.*) reports two cases of the internal administration of adrenalin for the control of hemorrhage of the nose, with excellent effect. Other hemorrhages have been treated by its adminstration per orem and hypodermically and the results have been favorable. The 1:1000 solution is used, and of this 20 gtts. is administered every two hours, with no untoward symptoms following, though in one case this was continued for twelve hours. Fifteen minims have been given by hpodermic method. There are but few reported cases of its internal use for control of hemorrhage. "Its vaso-constricter action to which are presumably due its hemostatic powers will give it a mild field of application. . . . After constriction of the vessels there must be normal return in caliber; it is just here that bleeding would seem theoretically to recur. It seems plausible, and my experience seems to support the idea that we can secure a gradual dilation of the vessels by reducing the doses gradually, as exemplified in my cases, and by prolonging the intervals of administration. Another plan, as some authority has suggested, is by giving atropine some hours before ceasing the use of the adrenalin, the former to be continued for a day.

"When the drug is to be used in emergencies, it seems rational to use it in the strongest solution made, 1:1000, and to give it in large doses, say 20 to 30 drops. I used it in 20-drop doses without observing any ill effects."

The Care of the Teeth.

A. E. Baldwin, M. D., D. D. S., LL. B., under the title of "Responsibilities" (*Jour. Am. Med. Asso.*) urges that more attention be paid to the deciduous teeth. The teeth of the growing child should be kept more carefully even than the teeth of an adult. In adult life only the waste of tissues is to be met by nutrition, but in the child the waste of tissue, proportionally as great as in the adult, plus the additional nutriment necessary to supply the needs of the rapid development. A child has an almost unlimited appetite and if the deciduous molar teeth are allowed to become sensitive, painful or lost, mastication is interfered with, and the food is "bolted." The tendency of the teeth is to move toward the median line, and if the deciduous teeth are removed before the permanent successor is ready to erupt, the space is filled by the crowding forward of those behind, and the arch will be destroyed, the teeth will be erupted in abnormal positions and irregularity and subsequent ills will follow. The child should be early instructed in the use of the brush—frequent inspections and prompt attention given on apperance of decay. Very great care should be given the first permanent molar erupted about the sixth year and the molars erupted subsequent thereto, because of its importance (first permanent molar) as the abutment of the arch, and the most important tooth at this or any other period, most of the irregularities and deformities of the lower face are caused by the loss or want of attention of this tooth.

Crowns and bridge work for those who have lost teeth sometimes do more harm than good, as by improper adjustment they may interfere with mastication and articulation, and thus cause the very ills they were intended to rectify.

Growing Teeth.

According to a Russian report (*Journal of Medicine and Science*) a Moscow dentist appears to have solved the problem of supplying the human mouth with false teeth which will grow into the gums as firmly as natural ones. Dr. Znameusky has performed several successful operations on dogs as well as on human beings. The teeth are made of gutta percha, porcelain, or metal, as the case may be. At the root of the false tooth holes are made. Holes are also made upward into the jaw. The tooth is then placed in the cavity. In a short time a soft, graduated growth finds its way from the patient's jaw into the holes in the tooth; this growth gradually hardens and holds the tooth in its position. It is stated that it does not matter whether the cavity in which the tooth is to be placed is one from which a natural tooth has been recently drawn.

Induction of Labor.

Olds writes of the induction of labor by means of a modified form of Champetier de Ribis balloon (*Ciurier of Med.*). The modified form of the balloon is much cheaper than the original instrument of French manufacture and consists of thin canvas covered with rubber, made in sets of four of conical shape, and can be boiled and kept in antiseptic solution. Its shape is such that it slips through the cervex only when a certain amount of dilitation takes place. The manner of using the balloons is as follows: After all necessary antiseptic precautions, the cervex is dilated to admit one finger, the membranes separated from about the os, the balloon is tested by filling with sterile water to see if it is intact, afterwards its base is tucked in, it is rolled up and clamped in the forceps. Its introduction is either by use of speculum or being guided over two fingers of one hand, introduced into the vagina. It can be held in position by the finger or forceps while an assistant slowly fills the bag with lysol solution, the tube securely tied, and patient dressed with antiseptic pad. If pains do not start at once or are not of sufficient force or frequency, slight traction may be made on the balloon, or small weight attached to the tube. The successive sizes may be introduced in succession if needed. They should be removed if pains do not start in twelve hours. Anesthetics will be needed only in primapara and very nervous patients. Examine for polapsed cord after the removal of each balloon. The following indications for the use of the balloons are taken from a paper by Dr. Voorhees in the *Medical Record* September 8, 1900:

1. To start pains when the membranes have been long ruptured, especially in breech cases.

2. In dry labors, when the child is in bad condition—there is an umbilical souffle, or it is passing meconium, or the heart is slow or irregular.

3. In prolonged and protracted labors oxytocics and chloral failing.

4. In rigid cervices of all kinds.

5. In hydramnion, when it is necessary to rupture the membranes.

6. In cases of twins, when it is necessary to rupture the membranes.

7. In shoulder presentations, when a Braxton-Hicks version can not easily be done.

8. To induce labor: (a) in cases in which a bougie fails or when the membranes are ruptured in its introduction; (b) in albuminuria; (c) in contracted pelves—to let the head down against the brim to engage, or preparatory to forceps or version; (d) in cases of a dead foetus; (e) in chronic endocarditis.

9. In placenta praevia, especially those cases in which the cervex is tough, or in which the placenta is over the os and one can not turn earily, preparatory to version."

The Relation of Mild Type of Diphtheria to the Public Health.

Thomas W. Solmon states that it is a well known fact that during epidemics of diphtheria, there is usually an increase in the prevalence of simple sore throat. That mothers, physicians, and nurses are particularly liable to such sore throats. Though such cases may not from a clinical standpoint of view come within the definition of diphtheria, they are of essentially the same nature and a susceptible person coming in contact with one of them may contract the disease in a severe form.

He points out: (1) When insusceptible persons become infected with virulent diphtheria bacilli, no leisons result, but the bacilli may be transmitted to susceptible persons and cause the disease; (2) susceptible persons may become infected with diphtheria bacilli wholly lacking in virulence, no lesions, no spread; (3) relatively insusceptible persons may become infected with virulent diptheria bacilli, and susceptible persons may become infected with feebly virulent bacilli, causing simple sore throat or catarrhal diphtheria so prevalent in epidemics.

The diagnosis of catarrhal diphtheria depends upon bateriological examinations. The same sanitary regulations which relate to the management of diphtheria should be extended to it, and adequate facilities for bacteriological examination should be provided. That the spread of diphtheria and the continuance of many prolonged epidemics depend in no small measure, upon the mild cases of diphtheria in adults is a fact which cannot be ignored.—*New York Medical News, Nov. 21.*

A Plea for the Microscopic.

Louis M. Warfield in the *Atlanta Journal-Record,* says that the difficulty of diagnosing certain protracted and continued fevers is still a serious problem in the South. Some say it is malaria, some call it typhoid and some typho-malaria.

He quotes eminent authorities to prove that while it is possible to have a double infection with the bacillus of Eberlt and the plasmodum of Laveran, that the malarial manifestations are usually developed by the typhoid poison, and are only marked at the outset of the enteric fever and at its terminating, that to this the term typho-malarial fever may be applied to indicate not a separate disease, but a double infection, that out of 288 cases of typhoid fever reported by Osler and Ewing, they found two cases of double infection. He points out the necessity of an early diagnosis in order that we may take proper measures to guard the community.

For both the Widal reaction and the blood cultures a bacteriological laboratory must be near at hand. For the busy practitioner he emphasizes the value of the microscopical examination of a drop of blood. In a fresh specimen we can tell the following:

1. General condition of the blood cells, aenema, etc.

2. Leucytosis.

3. Eosinophilia, or marked increase in any of the white cells.

4. Presence or absence of malarial organisms.

One smear is not sufficient to exclude malaria; to be certain one must withhold quinine and examine for several days. If there is a marked increase in the number of leucocytes, we can

look for a pneumonia endocarditis, septicemia or a septic complication in a typhoid fever or malaria. Finally a protracted fever in our country occurring in the autumn that resists quinine and shows no malarial parasites in the circulating blood is unquestionably in most cases typhoid fever.—*Atlanta Journal-Record of Medicine,* November.

Hysteria in the Male, with Report of a Case.

Sheldon G. Evans, in *Journal Assn. Military Surgeons,,* claims that hysteria in the male is by no means such a rare disease as was generally supposed, occurring in the proportion of one male to four females. That we too frequently disguise the true condition under another name, for instance, neurasthenia or hypochondriasis, that the condition in the male is much more frequently mistaken for other diseases then in the female where we are always suspicious of hysteria. He quotes Perching's given conditions on which a diagnosis of hysteria may be based:

1. The exclusion of other functional diseases, especially epilepsy, and of all organic disease.

The existence of predisposition.

3. The occurrence of symptoms in response to suggestion.

4. The occurrence of hyterical seizures.

5. The presence of hysterical stigmata.

The case reported was admitted to hospital for cerebro-spinal fever, and had remained in the hospital for one year, before coming under the writer's observation, during this time had had repeated convulsions. A diagnosis of hysteria was made and patient was placed on 1-20 gr. of apomorphine. The patient rebelled against the use of the apomorphine, the convulsions ceased, and he was discharged from the hospital at his own request. A number of months afterwards there had been on recurrence of the disease.

Dietetic Treatment of Acute Coryza.

Sternberg has recently called attention to a simple procedure, which was recommended by Williams in the middle of the last century (*Bost. M. and S. Jour.*). His plan was to "dry it up." Williams found, and Sternberg echoes his opinion, after an experience of years, that if liquids are totally excluded from the diet for twenty-four hours the congestion in the head, nose, and conjunctivae, and the irritating nasal discharge are greatly lessened. If the treatment is continued for the second day, the coryza will usually be brought to an end except for an occasional discharge of gelatinous, opaque mucus, which is apt to appear toward the close of such a catarrh. Of still more importance is the fact that the coryza is not followed by a cough, and that the treatment is a prophylactic against otitis media, or the extension of the inflammation into the adjacent nasal cavities.

To be successful, the treatment must be started at once. Fever is not a contra-indication, but chronic nephritis is. Total abstinence from liquids is not absolutely necessary, but one should indulge in but a few teaspoonfuls at a meal.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., FEBRUARY, 1904. No. 2

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

THE DOCTOR AND THE LAW.

To undertake to discuss the recent Supreme Court decision in the case of State vs. Biggs, dealing with the license law in regard to the practice of medicine from a legal standpoint, would be foolhardy in us, and we do not propose to attempt it. There are some points in this far-reaching discussion that are of interest to both the profession and the public that should be noted.

North Carolina doctors have long been proud of its medical act as being one of the oldest in the union, and especially of that feature which required an examination as to proficiency in the knowledge of medicine, before engaging in its practice. Our State, we believe was the first of the union to enact such a law, and the amendments of the eighties brought our statutes fully abreast of the more advanced thought on the question. It is only in the last two or three years that their wisdom has been questioned or their provisions seriously disregarded. The amendments of the last legislature, while a compromise of the question involved and not fully satisfactory to the profession, were accepted under the belief that they would meet the indications and there would be no further trouble in regard to it. The Supreme Court in this case rules otherwise, and as law-abiding citizens we, the medical profession of the State, will submit to it until a change is made. It will, at least, work less injury to the profession than to the public.

Te position of the medical profession in relation to medical laws has never been fully appreciated. The public regards any statute proposed by or emanating from the profession as inimical to its interest and for the sole benefit of the profession. While the statutes of North Carolina, and so far as we know, of all the states of the union, in regard to the practice of medicine, which emanated from the profession, may incidentally benefit the physicians as a class, they are of far more good to the public. The public cannot see the usefulness of such a course, forgetting the fact that the doctor's whole life is one devoted to the welfare of others. The

confidence of the public in the ability of the profession generally is of inestimable value, and it is secured to a very great measure by the provisions of the statute requiring that one shall be well qualified for the work before entering it. The lives saved, the epidemics controlled and the sufferings relieved in the last few years are some of the results of these same statutes in placing the practice of medicine in the hands of those prepared for it.

Dr. Biggs, who styles himself an osteopath and practices a system of medicine and surgery without the use of either drugs or the knife, may be entitled to the degree he claims. He may be an educated, refined and accomplished gentleman, but he is not qualified by a knowledge of the human frame, the physiology of the different organs, or the pathology of diseased states, for the recognition of disease or the application of appropriate remedies, and does not claim to be.

In this respect the ignorant plantation negro, with his hoodoo charms, is a type. Both treat diseased states without a knowledge of the principles underlying them, neither use drugs or knife, and both appeal for patronage to the lower elements of human nature—the one to credulity and the other to ignorance and superstition. If Dr. Biggs can, by paying a fee of five dollars to the State, practice the healing art, the witch doctor with his hoodoo charms can do likewise. It is the injustice of placing the health and lives of the public, or any part of it, in the hands of such incompetents, against which we protest. The public is not adverse to being gulled, and it is a well known fact that any one holding himself out as a doctor can secure patronage.

The Supreme Court of the State has virtually said these are on an equal footing with the one who has spent years of study in gaining what was thought to be the knowledge requisite for the practice of an honorable calling. The court decides that the act creates a monopoly, and is contrary to the constitution. It may be right to crush out a monopoly, it is legal to do so, or our Supreme Court would not have so decided; but in this instance we pity the public that has to bear it.

Personally, the writer has great respect for Chief Justice Clark, the writer of the decision under consideration. His eminence as a lawyer, as a jurist, and a learned man are freely admitted, but with all due deference to his opinion and the court of which he is the presiding officer, we believe the assertion that the act was instigated by interested parties and its passage secured for private gains, was entirely uncalled for, and is an insinuation unworthy of the high calling of its author.

Since the above was written, there has appeared in the newspapers a copy of an editorial by Dr. R. H. Lewis, secretary, to be used in the next issue of the Bulletin of the State Board of Halth, from which we make the following extract from the Wilmington *Messenger*:

"As to the question of the amendment's creating a monopoly in the interest of the regular medical profession, we are unable to see how it creates a monopoly any more than the requirement of license from lawyers, dentists and marine engineers, for example, creates a monopoly in their interest. If there is any monopoly it is simply the monopoly necessarily incident to excellence. How can it be a monopoly when, to quote the words of the very ablest lawyers in the State whom we consulted about the bill, "the doctors of the medical profession are open to every class, race and sex, without regard to birth or station in life, upon the doing of three

things: First, proving a good moral character, proving competence, and paying the tax required by the State.'

"In the conclusion of the opinion the Court says: 'All the law can do is to regulate and safeguard the use of powerful and dangerous remedies, like the knife and drugs, but it cannot forbid dispensing with them.'

"How can it be held that the law 'forbids dispensing' with the knife and drugs simply passes our lay comprehension. As we understand the science and art of medicine and surgery, the most essential part of it is the ability to diagnose the disease by a thorough knowledge of the history and symptoms of disease and of the most approved methods of getting at the symptoms—to tell what the disease it—and then to decide in accordance with the experience of those best fitted to know whether to use drugs, the knife, massage, electricity, suggestion, diet, fresh air and sunshine, change of scene, etc.—or nothing—all used by the regular physician or omitted, as he things best. If the object of the law is to safeguard the lives and health of the people, it is certainly very ineffective as construed by our Court when it permits any person whatsoever, be he ever so ignorant or unprincipled, to assume the care and responsibility of a case of disease, no matter how dangerous or contagious. It wouldn't make much difference to the patient and his friends, we presume, whether he was killed by a powerful drug or a misused knife or by the failure to use at the critical time a sure remedy familiar to the well-informed physician.

"But it is in the contagious and infectious diseases that the inability to make the diagnosis would be most disastrous, not only to the patient himself, as, e. g., in diphtheria, but to whole communities, by failure to take the proper sanitary precautions.

"Our highest legal tribunal has spoken, and we bow to its decision, but we must say that to our ordinary lay common sense it seems mighty queer law, or construction of law that will require highly educated physicians to prove their competency to assume the care and responsibility of the sick, and then throw wide open the doors and invite all the ignorant and often unprincipled quacks, who merely adjure drugs and the knife, the two great remedies for disease, to come in and prey upon our people. To paraphrase the words of one of our old North Carolina judges in his charge to a jury in a case of another character: 'It may be good law, gentlemen of the jury, but it is durned poor equity'—both to the people and the medical profession.

"At the end of the opinion it is stated that two of the justices "concur in the conclusions,' from which we are glad to suppose that they at least do not endorse the method of reasoning or the style of presenting the subject."

WHAT CONSTITUTES MEDICAL ATTENDANCE.

The question as to what constitutes medical attendance is one of more than ordinary importance in the present state of medical science, and the interpretation of the laws relating thereto, and in connection with the recent Supreme Court discussion in North Carolina in the case of State vs. Biggs, the following clipping from the abstract department of *Medicine* will be received with interest. The two decisions do not deal with the same phase of the question, but the New York decision in our estimation takes a broader view of the subject, and more in accordance with the advanced state of medical sci-

ence, and the progressive spirit of the times:

"In giving an opinion on the case of J. Luther Pierson, of White Plains, held guilty of criminal neglect in allowing only a faith-cure healer to attend a child ill with bronchial pneumonia, Judge Haight, for the Court of Appeals of New York, defined 'medical attendance' as attendance by an authorized medical practitioner. He said: 'The legislature first limits the right to practice medicine to those who have been licensed and registered, or have received a diploma from some incorporated college conferring upon them the degree of doctor of medicine; and then the following year it enacts the provision of the penal code under consideration, in which it requires the procurement of medical attendance under the circumstances to which we have called attention. We think, therefore, that the medical attendance required by the code is the authorized medical attendance prescribed by the statute, and this view is strengthened from the fact that the third sub-division of this section of the code requires nurses to report certain conditions of infants under two weeks of age 'to a legally qualified practitioner of medicine of the city, town, or place where such child is being cared for,' thus particularly specifying the kind of practitioner recognized by the satute as a medical attendant. Sitting as a court of law for the purpose of construing and determining the meaning of statutes, we have nothing to do with variances in religious belief, and have no power to determine which is correct. We place no limitations upon the power of the mind over the body, the power of faith to dispel disease, or the power of the Supreme Being to heal the sick. We merely declare the law as given us by the legislature. We find no error on the part of the trial court that called for a reversal."

THE BUSINESS SIDE OF PRACTICE

In ye olden time, when the doctor's insignia was a ruffled shirt front, long cuffs to cover his hands that they might be kept tender and more sensitive, and a gold headed cane, no specific charges were made for professional services. The remuneration was regulated by custom and was not paid as a fee, because the alleviation of suffering was of such a sacred nature that to seek compensation for it was considered derogatory to professional ethics. Out of pure gratitude for aid given a honorarum in the shape of the customary amounts prevalent, or the sum usually donated to the special physician, was quietly, often sureptuously, slipped into the hand of the physician on leaving or placed in the pocket of his great coat left hanging in the hall or even in little receptacles made for the purpose in the lining of his coach before the door.

Whether this opinion of the sacredness of the services rendered precludes the idea of paying for them, remains with the public as a survival of part of the Darwinian theory of reversion to former types and characteristics—minus the gratitude aforementioned and which does not manifest itself to any appreciable degree, we are not prepared to say. The gratitude of the public is not sufficient for the needs of the doctor and the honrorum is no longer sureptuously placed where he can utilize it in securing the necessities of life. This and other causes perhaps necessitates a change in the doctor's pecuniary relations with his client. To depend upon the gratitude of his patients, their conscience to pay, or in many instances, the honesty or integrity of the debtor

for medical services, is to work hard, live scantily and die poor, for doctors, as a class, are poorly paid.

There must be a reason for this. To say that the doctor is a poor financier does not meet the question. Not every one would be able to live as well and meet his obligations on the meagre income of the average practitioner. The income is not there with which to financier. Most business men have a fair start in life before the doctor's career is hardly begun.

The credit system has been the bane of the South and has worked as much hardship on the medical profession as on any other class. The landlord is protected by statute against his cropper, the merchant has the advantage of a lien, the mechanic takes a mortgage. The doctor has no redress, nothing except the patient's desire to meet his obligations. He gives his time, talent and perhaps medicines on his faith in the integrity and honesty of the patient.

A writer in the *Alkaloidal Clinic* (January, 1904) enumerating some of the evils which deprives us of our just rights and compensations, mentions the need of better laws relating to the collection of medical bills. (If we mistake not, Alabama has such a law.) Corporation schools turning out M. D's for financial gains, the regular schools graduating many not adapted to the profession, and the familiarity of addressing the family physician as "Doc," the promotion of "sanitariums" and "resorts" by incompetents and pushing them by advertising as superior to the general practitioner, the retail druggist and his counter prescribing.

Some of these evils are avoidable and none are beyond improvement. The doctor himself must place a value on his services. He must by his learning and accomplishments in his profession be prepared to render services that will be felt and work that will show that it is of value. This may not be the place to say it, but there is too much half-hearted, slip-shod work by the profession, work that is of little value to the recipient and of which he is aware. The doctor is not in a position to demand fees for services rendered until he is so prepared. It is not enough that he has a diploma, a collection of books, a few instruments and a journal or two coming to his address. He must show that he reads and studies—that he keeps posted and is prepared for the work of his profession.

Not only this, but his character as a medical man must be such as will reflect credit upon the profession as a whole. He must command respect as a man and a physician by deserving it. Then, and not until then, will he be in a position to demand fees.

Professional character and ability will not collect all fees, though it will place the doctor in a better position for insisting upon payment. To secure the settlement of a large class of accounts some systematic plan must be adopted. Every doctor should have a definite plan of collection, which should be strictly adhered to. Because of the diversity of surroundings it is obvious that one plan will not suit all, whatever the plan. The public generally should know this plan, or at least the doctor's individual clientele should be conversant with it. Of one thing be sure, the sooner settlement is made after discharge of the patient, the better satisfied will he be with both the services rendered and the amount of the bill. The extent and character of the services are fresh in his memory, and the appreciation of them, especially if the doctor is successful in a serious illness, is greater, and there is an element of gratitude in the transaction that is lacking in long delayed settlements. There

is much more probability of the patient's calling the doctor with whom he has settled than if a bill was over due. There is a sense of independence with both doctor and patient when an account is promptly settled.

If possible to do so, cash upon discharge of the patient is the ideal plan of collection. This may not be possible in every case, in fact is practicable in very few, but the doctor should in no way intimate that some other time will do as well. He may agree to a postponement, but on the discharge of the patient is the best time for payment of the account. Business men of the present day send out bills on the first of each month, and there is no valid reason why doctors should not do the same, especially for town practice, or where the income of one's clientele is available at all seasons of the year. Country practice and among farmers it may not be practicable to collect monthly, but to notify patients by mail of the amount of indebtedness made during the month past certainly cannot be amiss even though payment may not be insisted upon.

There should always be a definite time for full settlement of past indebtedness, and by no means longer than once in each year, semi-annually or even quarterly is the better plan. For those doing a practice among farmers once a year is probably all that could be demanded, though where the farmer has ready money the delay may not be necessary. Whatever the time selected by the doctor for full settlement, should not be extended If satisfactory settlement cannot be made otherwise, take notes with security, if obtainable. See to it that the book account is closed at the expiration of the period selected

A few physicians can collect their own accounts to better advantage than an agent, but the majority will do better to place their bookkeeping and closing of accounts especially. in the hands of a good collector. A collector can be more persistent in his demands. It is more a matter of business between the two without the disadvantages of pressing a personal friend, or of harrassing one for whom the doctor himself has regards on account of former associations in the making of the bill. If the account is to be closed by note the collector can, with some better grace, demand security, if deemed advisable, either of personal property or endorsement. All notes for services should be made payable at a specified time, and with interest, the maker of the note being allowed large latitude in naming the date for payment, and its settlement should be demanded on maturity.

It requires very great discretion in refusing to visit patients with over-due accounts that no violation be done the doctor's implied obligation to relieve suffering, and that harm shall not come to reputation as being too hard upon unfortunate people. These last should have our sympathies and if need our help. If it is necessary to refuse, be honest in it, and say candidly and firmly it is because of the non-payment of former accounts, and not give an excuse of too busy, or sickness in own family. Such subterfuges may pass for awhile, but will eventually bring loss of respect and loss of practice.

The professional "dead beat" is in every community and exactly what to do with him is often a problem hard to solves; when known as such, we do not think it amiss to refuse him attendance, though this may often work hardship upon innocent members of his family. He will never pay the doctor as long as it is possible to avoid it, and it is only when he can not longer secure professional services that settlement is made.

One indifferent collector in a town

or neighborhood will derange the whole section as to collections, and not only for the present, but for future generations of doctors. Every doctor owes it to the profession at large that he make an honest, systematic effort to collect his accounts.

DRY ANTITOXIN.

It has always been the practice of the JOURNAL to commend the good and discourage the mediocre in medicine.

Neither do we believe in theorizing unless by thus analyzing a problem a germ of truth can be found.

It is worth the time to analyze the great questions involved in sero-therapy.

It seems that thus far no one has been able to make liquid antitoxin that will keep well for any great length of time. One year after manufacture it has lost the most of its curative value. Look at the date on the label of the next package of liquid antitoxin you buy. That gives the extreme limit of its reliability.

The French have succeeded in making antitoxin in dry form that keeps indefinitely in any climate. This, one can carry in his medicine case for years and be always ready to treat diphtheria. It is said to be readily soluble. It is claimed that this serum as made by the Pasteur Institute of Paris, France, will keep perfectly anywhere. It can now be obtained in this country. In fact, it is advertised in this number of the JOURNAL.

THE PRICE OF ANTITOXIN.

Our attention has been called to sensational articles appearing in the Chicago papers, in which the manufacturers of antitoxin are charged with having formed a trust and advancing the price of diphtheria antitoxin. We have investigated the matter, and can say positively it is not true that the antitoxin manufacturers have combined in a trust; it is not true that the prices of antitoxin have been advanced, but to the contrary, the prices of antitoxin have been reduced when quality of serum is considered.

We have from authoritative sources that for a long time the different manufacturers have endeavored to improve the quality of diphtheria antitoxin. It has formerly been the custom to manufacture two strengths, known as Standard and Concentrated, or X and XX. There were also supplied certain sizes, known as 500 unit and 1,500 unit packages. There is now but one strength of antitoxin that will be placed on the market, and that will be practically the highest strength, formerly known as Concentrated Serum. This is the best quality of serum obtainable, and on this quality instead of the prices being advanced, they have been materially decreased. For instance: For the 1,000 units there is now a charge of $2.00 against a former charge of $2.25; for the 2,000 units there is now a charge of $3.50 against a former charge of $4.00; for the 3,000 units there is now a charge of $5.00 against a former charge of $5.75; for the 4,000 units there is now a charge of $6.50 against a former charge of $7.50.

The 500 and 1,500 unit packages have been discontinued, the 500 units being insfficient to insure thorough immunization, and the 1,500 units on account of its small demand.

You will thus see that the interests of the medical profession have been safeguarded, inasmuch as but one strength—and that the best—will insure the highest quality of antitoxin being furnished. The revision of prices is also decidedly in favor of the physician and his patient, because the physician is now able to get the best grade

of antitoxin at a lesser price than formerly charged.

Instead of marketing antitoxin by number as heretofore, it is sold by the units package, 1,000 units representing an immunizing dose; 2,000 units, a small curative dose; 3,000 units, a moderate curative dose; 4,000 units, a full curative dose. This style of nomenclature makes it easier for the physician than heretofore, and since the best quality of antitonin is sold at a lesser price, it will prove an additional incentive to use full doses, which all authorities recommend in order to secure best results from antitoxin.

For some years the Chicago board of health purchased the surplus serum made by the city of New York. When Mayor Low discontinued this sale, the city of Chicago, by playing one manufacturer of serum against another, obtained a price that the manufacturers all claim is less than cost of production. As we understand the situation, the makers of antitoxin have reduced the cost of doing business by eliminating some sizes of packages that were not of value, and by marketing only one grade of serum, thus eliminating an enormous expense caused by the return for exchange of many packages of old antitoxin, and they are giving the profession and the patients the benefit of, at least, some of this lessened cost.

The outcry from Chicago comes in the nature of "kick," because the makers of antitoxin can see no good reason for selling the wealthy city antitoxin at less than cost.

Selections From Our Exchanges.

Adrenalin in the Treatment of the Cardiac Toxemia of Pneumonia.

The writer, Henry L. Elsner, M. D., of Syracuse, N. Y. (*New York Medical Journal,* Jan. 2, 1904), directs attention to the appalling mortality of pneumonia due to the resulting cardiac toxemia. The prime factor in this disease is a toxemia with obstruction in the pulmonary circuit, leading to cardiac asthenia. Marked changes occur in the right half of the heart, with far reaching degenerative changes in the muscle, heart-clots, and vasomotor paralysis.

Three remedies meet the indications presented by the circulatory changes due to paralysis of the vasomotor centers, the dilated condition of the arteries and the weakened heart. These are strychnine, digitalis and suprarenal extract or Adrenalin, its active principle. Adrenalin acts on the heart and blood vessels favorably; it does not act on the vasomotor center. Hence, it may be used to assist strychnine. When the vasomotor center is exhausted and blood pressure study proves the inefficiency of strychnine, Adrenalin may still be administered, and, in some cases which seem unpromising, when combined with the method of stimulation about to be suggested, we may carry the patient beyond the critical period to a safe recovery. Suprarenal extract, or Adrenalin, has seemed to the author to act as a needed food in all infections where there is danger of myocardial degeneration. He reports a case of pneumonia, in a woman, the mother of five children, in whom it had been impossible to raise a continually lowering blood pressure with strychnine. The systolic blood pressure was almost immediately raised by the repeated administration at short intervals of fifteen minims of a one to one-thousand solution of Adrenalin hypodermatically, and the patient was saved.

Our Young Practitioners.

In all of the professions there is a tendency toward commercialism. The lawyer who formerly led a strictly individual life and devoted his spare hours to literature and other intellectual diversions is now becoming simply an important cog in the great business machine.

The clergyman to succeed, according to the modern definition of that term, must, besides having eloquence for his congregation and comfort for his sick and troubled individual parishioners, be a keen business man, a good judge of real estate, and an astute investor.

In the medical profession the good old practitioner, to whom every person told his troubles (instead of going to a policeman), who never sent out a bill, and who finally died and was buried in the presence of a great concourse of people—the most of whom considered that by their presence all outstanding accounts were settled—and whose widow and fatherless daughters soon afterwards had to start a boarding-house in order to eke out an existence, is becoming a tradition.

Covetousness, selfishness, greed are abominations, but the idea that a physician should be interested in the welfare of every family except his own is just as reprehensible.

Yet we fear the pendulum is swinging too far, and that the tedency of the medical profession is toward that which is material, sordid, debasing.

We know in Los Angeles many bright young medical men who are only studying enough to attend to the practical needs of their patients, who devote but little time to general reading, who rarely attend the medical society, and who are doing almost nothing toward self-culture or towards the general uplifting of the profession.

The young practitioner should acquire the habit of writing his observations and deductions out in full and, as often as possible, reading carefully-prepared papers before his fellow practitioners. It is very important that he should be an accurate observer, and nothing will develop this as quickly as the realization that his observations are to be made public for the criticism of the profession at large.

He should take every opportunity to think and speak on his feet. Medical society meetings are excellent post-graduate schools, with the difference that what he may say in these meetings will educate him fully as much as what he may hear. Furthermore, the preparation of these papers is excellent training, and will lead the author to investigate many points and search many authorities that would otherwise have been overlooked. Young man, awake! Arouse yourself to a realization of your responsibilities, your opportunities, and your possibilities.—*Southern California Practitioner.*

Commercialism and Charity.

The newspapers are passing along a semi-humorous paragraph to the effect that a Pennsylvania physician has burned up as worthless $42,000 worth of accounts. The comments on this tale, true or otherwise, are various, and while there is an evident intent to make humor of it, there is underlying a serious strain which amounts almost to pathos. The *Buffalo Express* in referring to the matter said that physicians were the only class of men in business who would permit that amount of accounts to stand long enough on their books to become "no good." That appears to be the keynote of all newspaper comment. Physicians are notably lax in business methods, and suffer thereby.

Time and custom have made it a joke

among those outside the profession that a doctor is always the last to be paid, and yet it speaks well for the profession that there are so few judgments entered against physicians in the courts of law for non-payment of debt. The public knows nothing of the worries of professional life, of the struggle to collect accounts, the constant hammerings of delinquents, and the constant and callous evasion on the part of the once grateful debtor. From a purely commercial standpoint the average physician is a poor business man.

It is well and eminently proper that we should, as a profession, practice charity and relieve distress, heal the sick and comfort the afflicted, but it is not right that we we should give way our best efforts to an unappreciative class of patients who do not pay, although they are able to, and who will not pay, although they can. Various suggestions have been made looking to a regulation of the evil of free services, but as yet none seems to have been advanced which is practical.

The little half-humorous paragraph which is going the rounds of the newspapers might furnish food for serious discussion at the meetings of county societies.—*Buffalo Medical Journal.*

Home Treatment of Consumption.

Dr. Wm. Osler, in a recent address on the care of tuberculosis patients in their own homes, sums up the essentials of treatment of this affection in small town, country places, and suburbs of our large cities as: First, the confidence of the patient, since confidence breeds hope; secondly, a masterful management on the part of the doctor; thirdly, persistence—benefit is usually a matter of months, complete arrest a matter of years, absolute cure a matter of many years; fourthly, sunshine by day, fresh air night and day; fifthly, rest while there is fever; sixthly, breadstuffs and milk, meat, and eggs. Much has been said and more has been written of late years in regard to the treatment of the tuberculous by removal to warmer climates and prolonged residence in sanatoria. While this has been evcellent advice it must be remembered that only a very small proportion of those afflicted can afford such absolute changes in their mode of living. The majority must remain at home and make the best of the situation. For these, as Dr. Osler says, much can be done and cures can be effected by skillful management on the part of the attending physician quite as well as at high-priced health resorts.—*Med. Age.*

Pneumonia, But What of.

One of the leading city health departments justly avers that, while the work of restricting consumption is vitiated by exaggerated and panicky fears, the intemperate and sensational crusaders see consumption only and nothing but consumption Yet not a single reference was made by any speaker at the recent public health meeting to the alarming increase of pneumonia. No suggestion was made of measures for the restriction, no committee appointed for the study of "the most widespread and fatal of all acute infectious diseases"—a disease which has increased 53 per cent. in the number of its deaths since 1890, while the consumption deaths are steadily decreasing. Already, thus early in the season, the pneumonia deaths outnumber the consumption deaths, and they will continue to do so for the next thirty weeks or more. At the midweek conference of the heads of divisions and bureaus the chief madical inspector was instructed to call upon his assistants for suggestions of measures for the re-

striction and prevention of this disease, to be embodied in a circular for general distribution.

The party sent out by the department of anthropology of the World's Fair to the Congo country of Darkest Africa to gather together for exhibition at the exposition specimens of African pygmies, has sailed from New York. The Rev. Samuel Phillips Verner, president of the Stillman Institute, of Tuskaloosa, Ala., and a noted traveler in African jungles, is the leader of the expedition. In company with several African boys, whom he brought to this country several years ago, he will proceed to Las Palmas, on the west coast of Africa. Dr. Verner has instructions to bring back with him eighteen of the most interesting specimens of the human race that will probable be seen at the World's Fair. There will be none but pygmies in his party, classified so as to interest the scientific student of ethnology, as well as the mere curious spectator. His instructions are to bring back one pygmy patriarch or chief, one adult woman, preferably the wife of the chief; an adult man, preferably the son of the chief, and an adult woman, wife of the son. Others to be included in the exhibit are a male and female youth, two infants, four adults, a priest and a priestess, either of the Batwa or Dombe tribes; one fine type of the red African, preferably of the Ndombe tribe; three more red Africans and two native pygmies, each of a distinct ethnic type from the others. After the fair these people will be returned to their homes.—*American Medicine.*

Shoo suggests as an explanation why certain districts are immune to malaria, while others contiguous thereto may be infected, may rest on the natural food of the mosquito. His observations on malarial infection in Northern Holland in 1902 were to the effect that he was unable to infect anopheles when these were fed on acid fruits, such as ripe tomatoes. It mattered not whether the insect was fed before or after infection, but if they were fed upon food such as watermelons or sugar kept in plain water, they could with approximate certainty be infected. Celli makes a similar observation regarding the distribution of malaria in certain districts of Italy. Some districts are given up very largely to the cultivation of tomatoes. The persons living in such are free from malaria, whereas those living contiguous thereto, not cultivating these are infected, the same species of anopheles being prevalent in both places. It has also been suggested that possibly the cultivation of the potato, the plant being quite acid, has some bearing upon the prevention of malaria in England. Before its cultivation became general, malaria prevailed in England quite extensively, and now it is extinct.

In the experiment of the Japanese government with a regiment sent to Formosa in 1901, at the season when the fever prevailed, two battalions were selected, one was protected against mosquitoes, and the other allowed to live under the ordinary condition of camp life observations were made on these two battlaions for over five months. The protected battalion escaped from all forms of malarial infection, while the unprotected had 259 cases of fever.—*Modern Med. Science.*

Carcinoma.

The case reported by G. B. Massey (*N. Y. Med. Jour.*) is that of a woman of 57. The carcinoma was situated in the outer half of the right breast; it was movable and was about 2½ inches in diameter. The skin overlying was ulcerated and there was an enlarged

gland in the axilla. A large negative pad was placed in moist contact with the entire back, and, under general anesthesia, the active electrodes of zinc coated with mercury were inserted, one at a time, into the growth near its periphery, connected with the positive pole of an apparatus with a pressure of 160 volts, direct current, and a current of about 200 milliamperes to each electrode, was gradually turned on. The area to be destroyed made it advisable to employ from 3 points to 4 points simultaneously, the total current in circuit being raised to 729 milliamperes at the expiration of about 20 minutes. One of the points was placed in the middle of the axillary gland and kept in this situation during the greater portion of the operation. At the expiration of 1½ hours the whole growth, the diseased gland, and the intervening tissues had been necrosed bloodlessly and a considerable zone surrounding the necrosed area rendered sterile, so far as outlying carcinoma cells were concerned. At the end of 6 weeks the slough came away, leaving a clear, granulating wound, which healed readily. A series of photographs are given, showing the appearance before operation, during the healing, and the scar a year later. The patient is in better health than for a number of years.—*American Medicine.*

Immergencies During Pregnancy.

A. E. Morison, in *Lancet,* reports 5 cases of interest, because in all the progress of pregnancy or parturition was complicated by conditions demanding immediate action. Two were of women with transverse diameter of the pulvis so contracted that normal delivery was found impossible after many hours of labor, and a Porro-Tait operation was performed in both with the delivery of living children and subsequent complete recovery of the patients. In one case a Porro-Tait operation was performed at term for sarcoma of the pregnant uterus, with the delivery of a healthy, living child and the partial recovery of the patient so that she left the hospital two months later; but she gradually failed in health and strength, and died from malignant disease 117 days after the operation. In case 4, the patient in the sixth month of pregnancy became eclamptic, the epileptiform fits rapidly succeeding each other. Cesarean operation was performed, the child was found dead, but the patient recovered, and some months later reported herself as again pregnant. Case 5 was rupture of pregnant uterus at the fourth month, rendering an abdominal section necessary. Because of the condition of the patient and the ragged, probably septic tear of the uterus, supravaginal hysterectomy was performed with recovery of the patient.—*American Medicine.*

Enlarged Bronchial Glands.

J. R. Clemens (*Amer. Med.*) says enlarged bronchial glands in children are important for 3 reasons: (1) Their great frequency; (2) the manner in which they are overlooked or ignored, and (3) their potentiality toward tubercle, and hence the danger of neglect. He states that in 70 consecutive cases in a children's clinic, where the patients were brought for various ailments, in 20 instances enlarged bronchiel glands were found. Hector McKenzie reports that in 897 cases of tuberculosis in children the lymphatic plands were enlarged in 88 per cent. of cases. The writer found in 120 autopsies the children presented tuberculous lesions and caseation of the bronchial glands in 80 per cent. of the cases. Medical and hygenic treatment can do much to prevent this condition and

cause its abatement, even when it has started. Open air life, sound food, and the medical use of iodid of iron arsenic, etc., will prove of great benefit in these cases. Occasionally, due to pressure effects of the enlarged glands, cyanosis of the lips and face, spasmotic attacks of dyspnea and an increase in the anteroposterior diameter of the thorax due to atmospheric pressure and obstruction of the trachea are seen. Sometimes chest wall known as bgky bgy bkgg there is recession of the soft parts of the chest wall with resulting malformation known as "pigeon breast." Pnffiness of the face will sometimes be found, suggestive of renal disease. A very suggestive combination of conditions is (a(enlargement of the cutaneous veins over the upper part of the chest; (b) some deficiency of resonance over on either side of the manubrium, and (c) a venous hum in the same position when the head is retracted, especially if these occur in a thin, delicate-looking child, suffering from a cough for which no cause can be detected in the throat or lungs and from slight intermittent evening pyrexia without assignable cause.—*American Medicine.*

Syphilis and Divorce.

Prince A. Morrow, in *Medical News,* says communication of syphilis in married life may affect (1) contracts to marry; (2) annulment of the union; and (3) divorce. From a survey of the jurisprudence of syphilis and divorce, it appears that when a woman has been infected with syphilis by her husband, the law may grant her a divorce on the statutory ground of cruelty or infidelity. In some States in America, and in some foreign countries, suit for divorce may be instituted on the grounds of "cruelty"; in New York State, only "infidelity" is recognized as sole ground for divorce; the charge of cruelty is not pleaded. Under the present conditions of the law a physician should advise his patient that syphilis should never be evoked as a cause of action for divorce, unless it constitutes the chief or only phase of cruelty that can be alleged. The charge of infidelity, if it can be sustained, is always a preferential plea. This in no way reflects upon the wife, whereas a plea of syphilis, even if it be sustained and divorce granted, casts at least the odium of loathsome disease upon the wife. To prove the charge of syphilis she must prove (1) that her husband has syphilis; (2) that she has syphilis; (3) that the syphilis of the husband is the origin of her own; this, in many instances, is difficult. It is rarely advisable that the physician in charge of either husband or wife should appear in court in connection with the divorce involving the question of syphilis. The court should appoint a medical expert for that purpose.—*American Medical.*

Ophthalmology and Othology.

GLAUCOMA.

The following review of glaucoma by Dr. W. A. Shoemaker of St. Louis, in the *Medical Bulletin of the Washington University* seems to meet the requirements of distinctness and brevity and is therefore introduced here:

"*Glaucoma.*—Glaucoma, according to Fuchs, constitutes about 1 per cent. of all cases of eye diseases; a disease which is of extreme interest to all ophthamologists, and *should* be to all general practioners, from the fact that its accurate and prompt recognition is absolutely essential if sight is to be saved.

"Unfortunately, general practioners, as a rule, are not as familiar with the symptoms of inflammatory and simple glaucoma as they should be for the sake of the patient's vision, and their reputations.

"Cases of inflammatory glaucoma are constantly coming under the observation of ophthalmologists that have been diagnosticated as iritis or irido-cyclitis (occasionally conjunctivitis), and treated with atropine. The simple non-inflammatory variety is mistaken for cataract and the patient advised to wait until it matures before consulting an oculist. In the former class of cases what chance the patient may have for his sight, and in the latter the patient drifts along, his vision gradually growing worse, until he feels that the "cataract" must surely be about "ripe," when he consults an oculist only to be told the true nature of the disease and the hopelessness of his case.

"Inflammatory glaucoma has certain symptoms peculiar to itself and others which it has in common with iritis and irido-cyslitis. The latter are the ones that mislead the general practitioner and are:

"(1) Dimness of vision; (2) pain in the eyes, forehead and cheek; (3) photophobia, lachrymation, and (4) ciliary and conjunctival congestion.

"In addition to these we have in glaucoma shallow interior chamber; (3) dilated pupil, generally oval in shape; and (4) hazy and anaesthetic cornea. In iritis and irido-cyclitis: (1) Normal or at times reduced tension (very rarely increased); (2) deep anterior chamber; (3) small pupil; and (4) sensitive cornea which may or may not be hazy.

"In order to make a differential diagnosis between inflammatory glaucoma and iritis or irido-cyclitis, it is not necessary to have a knowledge of ophthalmoscopy, but one must be able to recognize (1) the different tissues of the eye as seen by ordinary inspection; (2) normal tension; (3) normal size of pupil, and (4) normal depth of anterior chamber. For this reason, we cannot too strongly urge upon students the importance of embracing every opportunity to familiarize themselves with these points.

"To make a diagnosis in cases of simple glaucoma a knowledge of ophthalmoscopy, as well as of the field of vision, in health and disease, is absolutely essential."

When to Operate for Ripe Senile Cataract, the Other Eye Possessing Useful Vision.

George F. Keiper, A. M., M. D., in *Annals of Ophthalmology,* October, 1902, says: In order to learn the sentiment of the profession concerning the removal of a ripe senile cataract when the other eye possesses useful vision, Dr. Keiper addressed the following question to the members of the section of ophthalmology of the A. M. A.: "Question. Do you remove a ripe senile cataract if the lens of the other eye is clear, or if opaque possesses useful vision?" He received 102 answers from these gentlemen. Sixty-four replied in the affirmative, 28 in the negative and 10 replied that they would if urged by the patient, or if other circumstances warranted it. Seventy-four out of the 102 were in favor of the operation. The reasons advanced by those in favor of the operation were, the increase in the visual field, the inadvisability of allowing the lens to become hypermature, for cosmetic effects, and because it rendered it possible for the patient to continue without interruption whatever occupation he might be following. Dr. Keiper urges the removal of the ripe senile lens, irrespective of the condition of the other one, for the following reasons: "First, the patient has a larger field of vision. This is a source of protection against accidents whose cause may originate from the otherwise blind side. Second, the avoidance of dangers and difficulties of

extracting an over ripe lens. Third, continuous vision because the other lens is usually affected. Fourth, the patient possesses more comfort with vision in both eyes. Fifth, the patient's appearance is better."

The majority certainly have the best of the argument. For the reasons above enumerated, the removal of the lens under the conditions mentioned is certainly justifiable to say the least. The objection could only be made on the ground of confusion of vision because of the high anisometropia induced by the removal of the lens from one eye and not from the other. In my own vision unless the attempt is made to correct the aphakic eye.

The Dietary Treatment of Constipation.

Henry F. Hewes has made a careful study of this subject. He first aims to learn the source or underlying cause of the trouble; next the method or methods of treatment of the condition in its various manifestations which will tend to establish the natural physiological function as far as possible as a permanent and self-supporting condition. Either the patient has some definite pathological lesion or condition, or he is living under a faulty condition of hygiene. Those hygienic factors which bear most directly upon the physiological function of the intestine are: (1) The habit of a regular period of defecation; (2) a proper amount of physical exercise; (3) a proper diet. In regard to the diet, it is necessary first to ascertain the exact nature of the patient's accustomed diet, and to supplement this until it corresponds to the normal diet. Foods, from the point of view of their influence upon intestinal action, may be divided into three classes: First, all food substances possessing a large or unabsorbed residue. These are chiefly vegetable substances having much cellulose, as the grains in coarse form, green vegtabls, fruit, etc. Second, the foods containing considerable quantities of organic acids or other substances which increase intestinal activity, such as the tamarind, prune, plum, manna, and, certain green vegetables. Third, the substances which undergo fermentation in the intestine, with formation or organic acids. These are carbohydrates generally, including the cellulose of the vegetables already mentioned. In the treatment of constipation, then, having established the normal physiological diet for the patient, there is included in it a fair proportion of the above special forms of food. Besides general directions as to given to give up drugs and to depend entirely upon the diet. The writer then gives several tables illustrating diets helpful in this condition, and discusses their use. The results of his researches show that in a very large majority of the cases of constipation, the chief, if not the only cause or underlying condition is a failure of the patient to follow a normal physiological manner of life; also in a large majority a complete cure can be obtained by a proper direction of *Surg. Journal.*

To My Old Saddle-Bags An Ode.

I lay thee away. Dusty, brown, weather-beaten, sun-warped, so thy vials fit not, rickety, forlorn, but friend to me these fifteen years thou hast been.

Always faithful, never faltering, wise and silent as an owl. What scenes hast thou witnessed, departed friend? Joy and sadness, perchance the rifest, noisiest grief when sable death did appear with her twin sister despair!

Couldst thou speak, old friend, many a tale might thy leathery lips unfold. Tales of midnight scenes, of darkest night, when the winds howled and the

tempest roared, making thy companion feel a mere atom upon God's great, dark prairie; when the north wind soughed as though earth, own own mother, exhaled her foulest breath that we might have chilliest air.

Naught were these to thee, old friend, but to thy companion much.

Though laid away, thou the blest of us two, no errors to thee are charged against the last great day.

Honest, faithful, trying to be true, to thy companion came grief; perchance errors, who knows?

Sounds of the wailing and moaning, grim death, the last child, the bride of a day, dead.

All these hast thou witnessed, yet silently. And to these thy ears inanimate were closed. But to thy companion, what fears, what misgivings, lest duty might have been truant, or the contents of thy vials misapplied.

But not so always. For many a time and oft to the woman and children, the father and husband, faithful, did we restore; the babe to the bosom of fondest mother, the brother kind to sister dear.

Then would the heart of thy companion rejoice—thank God—that some little good had been done by thee and me.

Farewell, old friend! Old and battered, thy companion as thyself, is worn and weary with the weight of others' troubles, inanimate thou and animate I, we shall hardly meet again. —*Louisville Monthly Journal of Medical and Surgeony.*

Instructions to Patients Affected with Syphilis and Gonorrhea.

Every patient at the Genito-Urinary Department of the Presbyterian Hospital in New York, receives, (according to Dr. Fallan Cabot—in *Medical Record*, a card with the following instructions printed on it:

Instructions to those suffering with syphiliss

Syphilis is a constitutional disease. It is "in the blood." Local remedies and taking medicine for a *few months* will not cure you.

You must be treated for three years.

The effects of this disease are far-reaching, and, if treatment is delayed, much more trouble and suffering may be caused, not only to yourself but to others.

The following rules must be observed for the first year:

1. Sexual intercourse should not be indulged in.
2. Alcohol in all forms should be avoided, as it always aggravates the disease.
3. Do not smoke or chew tobacco.
4. Sleep alone.
5. Under no circumstances should any one be allowed to use your toilet articles, such as towels, brushes, combs, razors, shaving brushes, etc.
6. No articles that have been in your mouth should be used by others, as tooth-brushes, toothpicks, pencils, pipes, cigars, cigarettes, forks, spoons, etc.
7. You must not kiss any one, especially children.
8. Brush your teeth night and morning and keep your mouth clean.
9. If you have bad teeth have them attended to by a dentist, and be sure to tell him that you have syphilis, so that he may take the necessary precautions and avoid the possibility of infecting others.
10. Acids in food and drink should be limited.

Instructions to those having gonorrhoea, or clap:

Gonorrhoea or "clap" is a local infectious disease which requires treatment until the physician pronounces you cured.

To avoid infecting others and to avoid complications such as bubo, stricture, swelled testicles, etc., the following rules should be observed:

1. During the first few weeks walking should be limited. When the discharge is profuse you should keep off your feet as much as possible.

2. Do not use alcohol in any form as it always prolongs the disease. Drink milk, tea, Vichy or seltzer, and from six to eight glasses of water during the day.

3. Avoid all sexual relations until you have been pronounced cured by your physician, as the disease may be given to a woman even after the discharge has apparently ceased. When it is present you should avoid sexual excitement as erection always aggravates the disease.

4. Always wash the hands after handling the parts. The discharge, if carried to the eye, will cause blindness.

5. Sleep alone, and be sure no one uses any of your toilet articles, particularly towels and wash cloths.

6. Never lend your syringe to any one and as soon as you are well destroy it.

7. Be sure that the bowels move every day; if they are inclined to be constipated, take a dose of Rochelle salts before breakfast.

8. Do not use mustard, pepper, horseradish or stimulating sauces in your food.

Dr. Cabot certainly deserves credit for having directed this method of instruction to venereal patients and it is to be hoped that other hospitals will follow in this work of education. We have heard much about prophylaxis of venereal disease the last year, but most of the plans proposed have been impracticable as to border on the ridiculous. This method proposed by Cabot seems to us the most rational and we long to see the time when it will be adopted.

Dr. Charles Deady, a well-known eye specialist of this city, in a very interesting and practical article on "Adjuvants to the Drug Treatment of Diseases of the Eye," in the *Journal of Ophthalmology, Otology and Laryngology*, pays the following tributue to the therapeutic value of massage in certain eye diseases:

In certain conditions of the eye, massage has attracted much attention during the past few years. It is a means which I have long used, and often with great satisfaction. In chalazion it will, if persistently used, often dissipate the tumor. In iritis in which strong adhesions have formed, I have many times succeeded in at least partially breaking them down by its use in conjunction with a strong solution of atropin (often the crude drug) and the internal use of merc. dulc. 1x or 2x (calomel), the latter to induce (if possible) fatty degeneration of the adhesive lymph.

The importance of re-establishing the circulation between the anterior and posterior chambers is so imperative, if we are to preserve the integrity of the eye, that no efforts should be spared to accomplish it, and vigorousu massage of the ball, however painful, should be persisted in so long as there is any hope of success.

Massage for Iritis.—In using massage to break down adhesions of the iris to the lens capsule, the patient is made to look down, so that the upper part of the sclera can be manipulated,

and the tips of the forefingers of each hand alternate in making firm pressure toward the center of the eyeball. After performing massage for a few moments in this manner, the eye should be turned upward and the same method followed upon the sclera below the cornea. Then each side of the eye is taken in turn, the patient looking in the opposite direction. By this means the fluid contents of the ball are displaced repeatedly, the resulting traction of the iris tending to loosen the adhesions, and a powerful solution of atropin (I often use the crude drug in the eye, if I can be present to watch its effects) having been previously instilled, the pupil dilates wherever the adhesions are torn and so the desired effect is gradually attained after repeated sittings. I have thus obtained results which would be entirely impossible by the ordinary use of mydriatics.

How to Relax.

Speaking of relaxation, do we understand what it means? Lie down on the floor, and give yourself up entirely to it; devitalize every muscle in the body, think your legs heavy, your arms heavy, your head heavy, your body heavy. Have someone test you to see if you are really relaxed, tossing an arm upwards and catching it, noting if it falls of its own weight, and so on with all the extremities. Take deep breaths while relaxing, and give yourself up entirely to the restfulness of it. When you have learned to relax, try practising it all through through the day. If, for example, you are reading, you will often find that you are using nearly all the muscles of the body, instead of only the few necessary to hold the book. Now relax all the other muscles and you will be surprised to find that an occupation which once tired you will now rest you.

If things come up to annoy and irritate you, try relaxing, and take a few deep breaths. The annoyance will not seem half so great as it did before.—Helen West Cooke, M. D., in *Good Housekeeping*.

On the Hypodermic Use of Adrenalin Chloride in the Treatment of Asthmatic Attacks.

Taking the theory that bronchial obstruction is brought about by a spasm of the fibers of the bronchi, the use of adrenalin in asthma could not be explained, but these doctors, working upon the basis that the obstruction is caused by a turgidity of the bronchial mucosa, used adrenalin chloride in hypodermatic doses in a number of cases, apparently with a great deal of success. In the first case seven and a half minims of an old solution was used during an attack, which produced a quiet sleep in half an hour's time. Adrenalin was given at other times in smaller doses to results. Reports are made of other cases all of whom were materially benefited in a remarkably short time, and in two minutes by this method of treatment the pulse tension is increased, while, during an attack, the pulse tension is liable to be decreased. The increase of the tension after the administration of adrenalin is to be accounted for by its vasoconstrictive effect.

In one case marked pallor of the face and extremities was noticed. Theoretically a dose sufficient to cause vasoconstriction is necessary to cut short the seizure. Doses that were not sufficiently large to do this failed to give relief. With fresh preparations of the drug, 3 to 6 minims of the 1 in 1,000 solution would usually cut short the asthmatic attack without any disagreeable results. This should always be given hypodermatically. Large doses by the mouth do not cause the same effect, nor do

sprays into the throat.—*Northwest Medical.*

Reduction of Intussusception.

The following method of reducing an intussusception has proved successful in my hands a short time ago, in a case occurring in a child of eight months. The child was seen within four or five hours after the occurrence of the trouble, and, the nature of the case being explained to the parents, they positively refused their consent to abdominal section. The child was then inverted and the colon filled with hot water by means of a rubber-bulb syringe, resembling a Politzer inflation-bag, and having a capacity of about four ounces. It was found possible to do this by pressing the syringe firmly into the anus during the child's efforts to expel the water, and then refilling the bulb when the paroxysm of straining passed over. Then, while manipulating the tumor through the abdominal wall with the left hand, the bulb was alternately compressed and relaxed, in much the same way as a plumber uses his suction-bulb in clearing out a stopped-up sinkpipe, and, after a little gentle manipulation in this manner, the tumor was felt to disappear under the fingers. This was followed by immediate relief of the urgent symptoms, although occasional vomiting and some pain persisted for a few hours longer, but the vomited matter was no longer offensive in character. The advantages of this procedure over the application of hydrostatic pressure by means of a fountain syringe are the greater control which the operator has over the amount of force applied, and the benefit of an intermittent, rather than a continuous, pressure.—*Medical Record.*

For Cerebro-Spinal Meningetis.

I see by the *Chicago Inter-Ocean* that there is an outbreak of cerebro-spinal meningitis. After I had been practicing about seven years, we had an epidemic of it here in Van Buren county. It was, of course, new to me and I could get no help from counsel, but I finally developed a successful treatment, and after that cured every patient that I saw early in the attack.

The treatment consisted in getting them into a sweat, with counter irritation to the spine until relaxation of the rigidity of the spine, and then giving large doses of quinine until the attack was broken up, and then after that attend to the stomach and bowels.

Every case that was given cathartics at the commencement of the disease died and most of them before operation of the cathartic. I hope the help this may be to some brother practioner will excuse me for the presumption of suggesting a treatment of so formidable a disease.—*A. G. Haskin, M. D., Medical Council.*

The Significance of the Normal Intestinal Bacteria.

Strasburger says that the bacterial flora of the human intestine normally serves a useful purpose, but may also become a source of noxious products. The question of whether anima' life is possible with a sterile intestinal tract is still undecided. Nutall and Thierfelder were able to cause an increase in weight in the guinea-pigs they kept sterile from birth, but Scottelius reached opposite conclusions with chicks. It is quite possible that the cellulose envelopes of many sorts of vegetable foods require bacterial agencies for their destruction, as no cellulose dissolving ferment is found in man or most warm-blooded animals. An important function of the intestinal bac-

teria is probably the prevention of putrefaction in the small intestine. Corroboration of this view is found in the fact that when sterile milk is given, putrefaction occurs in the small intestine, whereas in the presence of the bacillus coli communis and the bacillus lactis aerogenes putrefaction does not extend beyond the ileocaecal valve and only fermentative changes take place in the intestine above. When the bacterial growth becomes excessive, however, it injuries the body not only through the amount of nitrogenous material consumed in this way, but also substances that are products of the organisms. The middle ground between excess and deficiency of bacteria is therefore necessary for normal conditions in the intestinal tract.—*Medical Record.*

Discovery of the Small Pox Germ.

The newspapers of recent date published depatches from Cleveland announcing that Dr. W. T. Howard, Jr., of that city had discovered the germ of smallpox, and that the particulars of his find would be made known very soon. In reply to an inquiry regarding this, Dr. Howard writes that he has never stated directly or indirectly that he had discovered a micro-organismwhich was the cause of smallpox, nor has he authorized anyone to make such a statement. He writes: "In the discussion of Councilman's paper at the meeting of the American Association of Pathologists and Bacteriologists in May last, I stated that, through Dr. Howard's methods, I had been able to *confirm* many of the statements he made in regard to the bodies he described in smallpox, and that I agreed with him that these bodies are parasites and the cause of the disease. I am still of the opinion—indeed, I am more convinced those described and discovered by Councilman and his pupils are parasitec in nature and the cause of the disease. But I disclaim and repudiate entirely the recent newspaper statements that I have discovered the cause of smamllpox."—*Medical Record.*

Carbolic Acid in Small Pox.

Brindley and Bonis report in the *Lancet* results obtained by them in the treatment of smallpox by applications of pure carbolic acid. The pure acid in a liquefied state is applied to the vesicles over a limited area with a small camel's hair brush, the application being made on successive days. On the first day the face and neck are selected for treatment, on the following day the hands and arms, then the lower extremities, and, finally, the trunk. The vesicles rapidly shrivel up and scab over. One of the most striking results is the comparative mildness of the secondary symptoms or those coincident with the maturation of the pustules. In many of the patients the temperature remains at a low level. With regard to the subsequent pitting the carbolic treatment is decidedly beneficial in lessening disfigurement, although it is not to be relied on as a certain preventive. The use of the germicide tends to diminish the risk of infection from aerial convection and to remove the disagreeable odor of the disease. The total number of cases treated was 35, of which 22 were of a severe kind, mostly confluent.

The Value of the Physician's Service.

The charge to be made for professional services will necessarily vary with a number of different conditions. This proposition is recognized in the practice of the law, and it should be equally so in that of medicine. Occasionally a judge on the bench may decide differently, but a moment's re-

flection will show the error of such a decision. There are to be taken into account especially the nature of the case, the character of the treatment to be pursued, the time consumed, the skill of the physician, and also the station—public and private—of the patient. The physician is, by force of circumstances, compelled to have a varying fee even for similar service. He can not elect to treat only the rich; neither can he afford to treat only the poor. He gives much of his service gratuitouusly, so that none is deprived of the opportunities for relief afforded by his skill and ability. For these reasons the physician's fee can not be a fixed and inflexible one. This would seem to be the view held by Judge Ashman of Philadelphia, as expressed recently in a decision rendered in the Orphans' Court: "The life of a rich man," he said, "is worth more than the life of a poor man, and the physician has a right to charge the millionaire more for his services than he does the laborer. * * * The physician is unlike the merchant, who has goods of prices. He must give his best service in every case. But it does not follow that the service is worth the same in every case. * * * Human life has a pecuniary value of variable quantity, greater in the millionaire than in the laborer. Thus, the practitioner of common sense has a maximum and a minimum charge and makes out his bills to suit the pecuniary circumstances of the patient."—*Journal A. M. A.*

Degeneracy of the British Children.

The question of defective children is one that is being widely discussed widely discussed in Great Britain at the present time. The poor of great cities, and especially of London, are, owing to a variety of causes, greatly handicapped in the battle of life. The children are born, in many instances, mentally and physically deficient, and their environment, lack of proper food, and pressure of education tend to accentuate these failings. Dr. George Still has presented the theory that wrong-doing in children is not ordinary "naughtiness," but moral imbecility. In fact, many children are born degenerates and are not responsible for their actions. Associations, too, exercise a great influence on the child's nature, and when the taint is present, the subject grows up and develops into a criminal. Education, it is declared, is of no avail to render such children respectable members of society. On the contrary, it only has the effect of making them worse.

The London School Board has recognized that these "moral deficients" must be dealt with in an exceptional manner, and are organizing nomes in which they can be segregated and carefully watched. It has also been proposed to appoint a royal commission to decide what measures shall be taken with mentally and morally defective children. cording to the *London Daily Mail*, "in the minds of some of the promoters of this step is the idea that means shouuld be devised to separate such children, when of an age to be out of the control of any scholastic authority, from the rest of the world. Such a course is held to be necessary if the growing evil is to be checked."

Great Britain does not have a monopoly of degenerate children. In New York and other large cities of the United States moral imbeciles are by no means unknown. It might be well if the example of the London School Board were followed and efforts made to grapple with the evil.—*Medical Record.*

"Weltmerism" has received another set-back by a recent decision of the United States Supreme Court. Weltmer and a number of assitants advertised extensively in the lay press claiming to work many cures by "magnetic healing." Their offices were in Nevada, Mo., and their business grew to such proportions that the postmaster in Nevada was compelled to hire additional help to handle the mail. After an investigation by the Postoffice Department, the business was declared fraudulent and they were prohibited from using the mails. C. M. Bishop published an open attack on the methods of Weltmer, who sued Bishop for libel. The Supreme Court of Missouri refused to find the article libelous, on the ground that Weltmer had failed to show that the business was entitled to the protection of the law. The United States Supreme Court dismissed the case for want of jurisdiction, thus in effect affirming the decision of the Supreme Court of Missouri.—*Medical Record.*

Early Diagnosis of Cancer of the Uterus.

Dr. F. F. Simpson of Pittsburg, Pa., said the great body of the medical profession saw but a single case of cancer during the time they were treating hundreds of other afflictions, and naturally looked upon that malady as being relatively rare. As a malady, it was infrequent; but as a cause of death its frequency was appalling. Early in 1900 a note was addressed to the health departments of American cities, with an aggregate population of ten million, requesting a tabulated statement of deaths from cancer and from all causes during each year of the preceding decade. Statistics showed that of every fourteen people who reached the age of thirty, cancer would claim one as its victim. Bearing more directly upon the subject of cancer of the uterus, however, was the distressing fact that of every twenty-eight women who passed the age of thirty, one would be the victim of this disease. The paper was largely statistical, and the author closed by saying that the day was fast approaching when well-informed women of the cancer age would seek protection by regular quarterly examinations. Early diagnosis would then be the rule in cancer of the uterus as it was in appendicitis today.—*So. Surg. and Gyn. Assn. Med. Record.*

The Lay Press and Quackery.

The average country editor is open to the seductive, beguiling glances of the quack doctor. The sheen of gold which glitters in his inside pocket, after the contract has been signed, is an anodyne to his conscience and allays his fears of having been an agent to create practioners who wish to reach the ear of the public. The editor thus subsidized will print column after column of the vilest nonsense and justify his position by saying it is business. Oh, business! thy name is calumny, for what malicious accusations, what deeds of darkest hue, what acts so foul, what ruination so complete, hath been committed in thy name! And yet thou would have us respect thy sacred word, thy proud and glorious history! Is it possible that it is the chase after the filthy lucre which makes thee close thy eyes to the consequences of thy acts perpetrated under the name of business? Yes, alas! it is true. The editor of the lay press is not tnat honorable lover of the body politic that we supposed. No; he is an idolator, in love with the golden calf, and feeds his selfish lust for gold by stooping to humbug the people. But then the editor says, "If we must do dirty work you mmust pay cash," and so long as a cash

consideration is obtained the public will have Lydia Pinkham, Woodbury, Sweeney, Riggs and a few more familiar faces to smile upon them. The good citizens of Kirksville, Mo., will have the *Graphic* tell them what the modern Balsamo is doing to relieve hysterical females and disjoined individuals. The *Loyal Workman* of Ottumwa, Iowa, will try to tell how osteopathy was discovered in order to earn its "so much per column."

But why need we go on? The subsidized lay press is the hand-maiden of the quack—they are lovers for mutual benefit. Neither of them know anything about medicine as a science, and neither of them can tell the truth, and as they seem specially fitted to mutually admire each other, and as no divorce is imminent, we will have to accuse both as belonging to the unfit, untrustworthy freebooters, to be named only to be condemned.—*Frank Parsons Norbury in American Medical Journalist.—Journal of Medical and Science.*

Vital Statistics.

At the recent meeting of the American Public Health Association, held at Washington, the committee on vital statistics reported that effective co-operation had been instituted between that Association, the Conference of State Boards of Health, the American Medical Association, the United States Census Bureau and the United States Public Health and Marine Hospital Service for the improvement of the vital statistics of this country. Among the objects sought are the extension of adequate methods of registration, the use of uniform and comparable tables and rates in bulletins and reports, and the improvement of the international classification of causes of death. A pamphlet on "Statistical Treatment of Causes of Death" has been issued by the United States Census Bureau, requests for which should be addressed to Mr. W. A. King, Chief Statistician for Vital Statistics, Census Bureau.

It has special reference to the difficulties encountered in compiling deaths returned from several causes, and asks for the co-operation of the profession in framing a thoroughly satisfactory method of procedure in such cases.—*Jour. Medical and Science.*

Asthma.

Journal des praticiens, for March 21, 1903, gives Huchard's treatment, from which we abstract the opinion that a strictly milk and vegetable diet is advisable for the asthmatic. Iodides should be administered for twenty days in each month, and arsenic the remaining ten. The eupnoeic effects of the latter are well known. For the asthmatic crisis, morphine, one third of a grain, may be injected hypodermically, or the smoke from the following powder may be inhaled:

℞ Powdered belladonna leaves } of each 30 grammes (1 ounce)
Powdered stramonium leaves }
Potassium nitrate 5 grammes (75 grains)
Powdered opium 2½ gr'm's (37½ grains)

M. Burn a teaspoonful in a saucer and inhale the fumes.

New York Medical Journal and Philadelphia Medical Journal.

Colic in Horses.

A writer in *Medical World* (name not given) says that Fl. Ex. Cannisbis Indica in one ounce doses every half hour until three doses are given, will cure colic in the horse—usually only one dose being necessary if given at the beginning of the attack. Mixing with equal quantity of linseed oil prevents irritation of the stomach. A handful of glauber salts given with the horse's food twice a week prevents colic.

NCMedJ(Cos) 50: 124-125, #2, Feb 1904.

An Open Letter.

December 2, 1903.

Surgeon-General Wyman, Public Health and Marine Hospital Service, Washington, D. C.:

My Dear Doctor:—I note in your dispatch of October 22, 1903, to Dr. Guiteras, of Laredo, Texas, the following:

"For your encouragement I send extract from letter of Geddings, from Paris, received today. 'Dr. Roux tells me Pasteur Institute Commission has absolutely settled upon the mosquito as sole agent in the dissemination of yellow fever.'"

My, my, my dear doctor, I have brought to your attention again and again the testimony of Dr. Finley, Juan Guiteras, Dr. Havard, U. S. A., Dr. Rose, U. S. N., Dr. Murray of Public Health and Marine Hospital, Dr. Carter, same, Drs. James Carroll and Aristides Agramonte, of the United States Yellow Fever Commission, acknowledging the mosquito as the sole cause. Is not this authority as good as the "Pasteur Institute Commission?" If not, why not?

During all these months and years since leading physicians and scientists in this country have come to recognize this important fact, what steps have you taken to conform the practice of your department to the facts so long ago demonstrated?

It must indeed be "encouraging news" to you, after all the pressure that has been brought to bear by physicians and scientists to get recognition from you, and I hope it will convince Dr. Tabor, Health Officer of Texas, who last year ridiculed this idea which the Pasteur Institute now endorses. He may be able to draw some encouraging conclusions from this year's epidemic in Texas.

If the mosquito is the only natural means of transmitting yellow fever, I must say with Surgeon-General Sternberg, some one is to blame for this epidemic in Texas. Who is it?

In an article in the October *Century* L. O. Howard, of the Public Health and Marine Hospital Service, says:

"It may safely be predicted that never again in the history of the United States will an epidemic of yellow fever occur. And all of this has been brought about by the discovery that once more a mosquito must be blamed for one of the greatest of human ills."

Now while he is writing this, yellow fever is on its march from Mexico to Texas, and before the season is over there are at least one thousand cases and one hundred deaths. Who is responsible? Was it not murder to let 100 innocent people die, when the well-known facts about yellow fever were ignored? Must the American authorities stand by and let the American people die by hundreds until the "Pasteur Institute Commission has absolutely settled upon the mosquito as the sole agent in the dissemination of yellow fever?"

After the dread disease has gained a foothold and tied up commerce and given the Texas people a doubt as to the efficiency of the authorities—in view of their boast that there would be no more epidemics—all the "encouragement" sent from abroad will not wipe out the fact that there was a serious epidemic, and that the proper measures were not taken to stop it.

Now, who is to blame? I'll tell you. There is no co-operation of the health authorities. Texas, Louisiana and Alabama have no confidence in the Public Health and Marine Hospital or they would not place inspectors in the tropics where the United States Service has inspectors. The Public Health and Marine Hospital Service has no confidence

in the Cuba authorities or they would not put officers in Cuba at a cost of $30,000, per year.

Surgeon-General, for a year I have been trying to get you to admit that the mosquito was the only known means of transmitting yellow fever, and that quarantine regulations should be based upon that fact. Do you really believe it now—enough to revise the practice of your department accordingly?

At the First Annual Conference of the State Boards of Health with the Public Health Service, at Washington, in June, 1903, you declined to take this matter into consideration. I make the assertion that if this matter had been discussed and a campaign had been fought on the basis of recognizing the mosquito as the natural means whereby yellow fever is transmitted, there would not have been a case of yellow fever in the United States, and the predictions of Surgeon-General Sternberg and Prof. L. O Howard would have been correct.

We expect to see next year co-operation of the authorities for the protection of the people. All quarantine regulations against yellow fever must be based upon the demonstrated fact that the mosquito is the natural means of disseminating infection. And your department will revoke the unjust quarantine regulations that handicap the South and turn commerce from its doors without protecting it in the least from the ravages of yellow fever.

In my next public letter, I will review the epidemic in Texas and the unjust and unwarrantable detention of ships

Respectfully,

J. M. Lindsley.

President of the International Quarantine Bureau.

SELECTED PAPERS.

Business Methods.

So much has been written about the business side of medicine that it might seem superfluous to say more, yet the fact that so much is said proves to me that discussions on the subject are needed. In a recent report of a medical meeting one of the speakers said that he thought that too much discredit was shown to physicians about their non-business qualifications and that really they were very much alive to this important branch of the profession. I can hardly agree with him and the remarks brought out in *The Council* on the business side show that some uniformity is needed in business methods. Recently the American Medical Association has been reorganized on new and better lines with the State and County Societies as part of the organization. Would it not be a good idea at the next meeting of the American Medical Association to have a committee appointed to draw up some plan so that a uniform method of the business side of medicine be adopted? As the matter stands now physicians use their own discretion in the matter of sending bills, and I presume every one has the right to do as he pleases in this matter, but would it not be much better for every physician who is a member of a medical society to send his bills monthly without any regard as to the debtor? I have noticed that while my best friend in business is glad to sell me his goods he at the same time sends his bills on the first of the month. Does the average physician send his bill to the friend the month after his services are rendered?

Possibly the profession have been led

too much into the belief that medicine is not a trade. *It is not* in the ordinary acceptance of the term, but it certainly is *one way of earning a living*.

The physician must have money to live and properly take care of his family, and he cannot be properly equipped to treat disease unless he is promptly and fully paid for his services, and the sooner the profession make the public know that they are both physicians and business men, the more the public will show respect and the profession receive their just dues.

It is needless to say much about cutting bills, yet we all do it. Go to the merchant and buy goods and wait three or four months, then ask how much he will take for cash. I imagine the answer. He would laugh at you and suggest interest for a long standing bill. The one great trouble is that the average physician is too sympathetic and carries the troubles of too many. Physician also lack *esprit du corps*, do not stand side by side and lighten each others burdens, but too often carry a "little hammer" and do some knocking. The average account books kept by physicians are worthless from a legal stand point and not enough care is taken to post our books. I am glad to see that the Editor of *The Council* has placed before the profession a book that is a *Book*. I have used many systems and find them the best.—*Medical Council.*

The poor estimation in which physicians are held as business men by the public is notorious, and the blame belongs to the profession.—*Dr. John T. Davison.*

Ills of Indigestion.

By stale food one does not necessarily mean spoiled food, but simply food that is not eaten immediately after it is prepared. Such food is usually eaten cold. These are the everyday foods, such as milk, butter, sugar, cheese, sauces, salad dressings, bread, cold meats, tobacco, pie, cake, confections, etc. I think I can hear a murmur at all this array of good things to eat being barred out. Well, it is not so bad as that. There are plenty of good things to eat, and, for that matter, you may eat the most of these with proper preparation, but not all of them. If I am going to get you well enough to eat, and enjoy,, corned beef and cabbage for your dinner, as I have set out to do, you must be content with cutting short on the goodies.

"These foods," says Dr. Partch, "are the kinds that get infected with germs by lying around exposed to the air for a few days, and carry infection into the alimentary tract and poison the whole system." The stomach that has become anemic and weak from a "diversion of energy," or rendered rebellious by a sameness of diet is in condition to become a culture closet, media, and all, for the development of germs.

Pure gastric juice, as secreted by a healthy stomach, will destroy any known germ in from one to thirty minutes, but in an anemic, pale, lifeless, inactive stomach, the stale food bacillus, coccus, sarcina or saprophyte, gets in its baleful work with no opposition. Then we have either stale or acrid eructations of gas or food that make life miserable.

If the trouble were only confined to the stomach, the problem would be grave enough, but this sour fermenting mass is poured out into the intestines, and there is no clinician that, as yet, has solved the problem of its remote effects upon the economy. Some things we know, some things believe, and some only darkly hint at, for some future pathologist to work out and prove

its truth or falsity.

We know that we have butyric acid, lactic and other fermentations that produce gases. The acrid products formed produce abdominal pains. The gas distends the intestines, interfering with their action, thus causing constipation. The sour contents are only partially neutralized by the alkaline bile and pancreatic juices, and are a fruitful cause of diarrhea, mucous enteritis, etc.

Then there is the formation of ptomaines, with their absorption. Will some one tell us what are some of the remote effects of these? I believe that the functional diseases are largely due to these toxins. If there was a pathologic entity, a diseased organ that we could point to, as cause of sick headache, asthma, hysteria, etc., and knew what caused the diseased organ, we would have a clear case of etiology solved for us; but we can but rarely point to such a cause. Here is a man who is as well as anybody one day, and in a few minutes, or hours, he may have a violent attack of asthma, epilepsy or other functional disease. When the attack is over, he is well again. Later there may be pathologic changes. The asthma may result in an emphysema of the lungs, because of the violent efforts of the breathing muscles. The epilepsy may result in a melancholia or dementia, with changes in brain structure from not so easily demonstrated sequences. What may we then conclude, but that these diseases are caused by poisons generated within the body, producing at first only local and transitory effects, but later true pathologic changes because of long continued irritation?

Space forbids the taking time to speculate upon many other forms of disease that are produced by faulty metabolism, or half finished digestion. Many of them are cured by curing the patient of his faulty methods of eating.

Treatment.

What shall we do with these sufferers? What folly to depend upon tonics, stomachics, digestives, etc. Grant you they have their place, and are helpful for gaining the confidence of your patient, but your main effort must be directed to convert him from his evil ways —I mean faulty habits. You must impress upon your patient that he has to come to it, if he is ever to get well, and why not under your advice, as after long years, perhaps, of suffering. He never may be able to eat some things, other things he may eat occasionally, while many he may eat frequently. As for stale foods, he must sterilize what he can and leave the rest alone.

A change of foods is necessary, not only to give the stomach the stimulus of a new article of diet, but to allow the bacteria that live on one form of food to die out for lack of pabulum. When we have an acute milk infection, otherwise called cholera infantum, to treat, what is the rational course? To stop the feeding of milk, of course. So long as there is a particle of milk in the infant's alimentary canal, there is trouble, so we put the child upon a non-milk diet for thirty-six or more hours and he promptly gets well, simply because the germs all die out for lack of nourishment suited to them. So in these dyspepsias, the change of food gives time for the germ to die, and consequently fermentation stops, and your patient is well. This applies most perfectly to dyspepsia caused by the use of sweets or milk.

Summary.

Dyspepsia has many minor, *but only three great causes.* It has many manifestations, acute as well as remote, but these are all due to these three great causes, as a rule. The causes are:

(1) Repetitional dyspepsia, caused by

the eating the same things day after day, causing a revulsion and rebellion on the part of the stomach. (See December *Medical Council.*)

(2) Diversion of energy dyspepsia, caused by the diversion of the energy that should go to the great act of digestion, into other channels, either by mental or physical labor too soon after meals. (See January *Medical Council.*)

(3) Stale food dyspepsia, caused by the indigestion of foods that are not eaten for some days after being prepared, that consequently become infected with germs and poison the body.

These causes are seldom single, but the one causes the other to become more active.

These dyspepsias, whatever the cause, may take simple or complex forms. It may be a simple atonic, or it may be catarrhal or an ulcer; but if the diet is wisely chosen, carefully prepared, and properly eaten, "if there are ulcers, they will heal; if there is catarrh, it will vanish away."—*Medical Council.*

The Doctor in Court.

To illustrate how unnecessary and trivial the cause may be that sometimes brings the doctor to court, I will give my first and only experience.

It was nearly twenty years ago, in Pawtucket. A man working in the lumber yard had a timber strike him in the leg, fracturing the fibula, a few inches above the ankle; he was brought to my office, it was put up in splints and attended afterwards for two weeks at his home; then he became suspicious that his medical attendant had made a mistake, because there was little or no pain and the limb felt quite comfortable in every way. He called, therefore, another doctor who told him it was not broken, to throw away the splints and go about on it; this he did, but for some reason used a cane and did not return to work for several weeks. When my bill was presented, he not only refused to pay but threatened a lawsuit, alleging anxiety, confinement to the house and loss of time.

I turned the matter over to a lawyer who attached his wages and brought suit for my bill. I believed his imprudence in getting about so soon had resulted in a large callus that would be easily found on examination and so tell its own tale. The case came to trial before the justice. I requested Drs. Morton, Clapp and Ashton to examine the leg; they came at once upon this prominent lump on the bone and told the judge it had been broken and my case was won. If the case had been tried before a jury made up of his shopmates and associates, would they decided against this poor laboring man, who had been out of employment some time and needed his wages for the support and comfort of his wife and children? In other words, will a jury administer justice or dispense sympathy and charity? No law suit was necessary in this case. No doctor is ever unreasonable in his dealings with the poor. If Pat Riley had gone to the doctor with a hard luck story and shown any appreciation of the services rendered, a statement could readily have been made for a small amount and with easy payments.

In the early years of my practice, there came to my attention a striking example of the dangers that beset the pathway of the doctor with money. A young physician came to Kansas City, built a fine house, married a woman of fashion, took a prominent place in society, had business and entered upon what promised to be a successful career. One day he attended the broken arm of a hod-carrier; some two weeks afterwards, Mike got drunk, had a fight and all the arm dressings as well as most

of his clothing were torn off and he was left to lie on the ground through the night, exposed to a cold rain. The next day he was taken home and his arm found to be in bad shape, much swollen and very painful. Another doctor was called to take charge and cared for the case from that time on. The arm was permanently crippled. A willing lawyer was found who brought suit against the doctor. Have you the faintest idea it was the poor young man who had last attended and who could hardly pay his own office rent? Oh, no, the lawyer was too wise for that; he was after the bright and shining light, the doctor with money and these persecutions were continued until the doctor was finally ruined, although the bad results following the treatment of the injured arm could in no way be justly laid at the doctor's door. The doctor's money had excited the cupidity of the designing and its possession proved his undoing. Moral: doctor, don't be rich! I believe this applies with force to all practitioners, but more especially to the younger, whose reputation not being sufficiently well established can ill afford the rude shock such court notoriety brings.

Fortunately, my friend's sad fate has never proved a very threatening one to me. By way of example: I once attended a brakeman who had been thrown from his car to the road-bed and had a badly fractured wrist. In due time, he threatened lawsuit for malpractice. One night I inveighed him, without his lawyer's knowledge, into the Medical Society, presented the history of the case and had him examined by a score or more of the doctors present. Among the number was one he had secured to testify in his behalf but to whom he had misrepresented the facts. The patient heard each man present state that the result was excellent, the treatment proper and the best; that instead of censure and complaint, the doctor who took care of it was entitled to compliment and might well feel a just pride in such good work. Then the other doctor took back his adverse criticism, denied that he had said what the patient understood to be his words and refused to have anything more to do with the case. After leaving the society I informed the young man that I hadn't a cent the law could lay hold on, advised him to have his lawyer investigate that feature of the case and then go on with his lawsuit. It was never brought.

Quite recently there has been enacted within our own city courts a sickening travesty on justice. The main incidents were a fractured thigh, a recovery with shortening, a doctor in court, evidence by many of our best medical men that the treatment was correct and the results good for that kind of injury, that shortening was the rule, with few, if any exceptions, that eminent surgeons all over the world were unable to prevent this. The jury by some occult means, best known to themselves but hid from other eyes, found that the doctor was to blame to the amount of $2,375.00.

Dr. J. Leroy Fisher, a member of this Medical Association, was called some two years ago, "to attend a boy with a broken leg," as the message came. The lad had been climbing onto a heavy wagon which was passing on the street, became entangled in a loose rope that fastened about his knee, was thrown to the ground and dragged by one leg for some distance. The doctor found the boy suffering great pain, with the knee swollen and tender, with crepitation when the limb was moved. He put on a temporary splint to hold it steady, a soothing application to the knee, put him to bed and gave medicine

suitable to the condition.

Two or three days after when inflammation had somewhat subsided, he took another doctor with him, gave ether, found the femur fractured, reduced it and applied a Buck's extension apparatus, attached a weight of about four pounds and left things in good shape. Soon after the doctor found that the family were meddling with his splints; when the child complained of pain in the leg, they would take the extension weight up and let it rest on the bed. In about a week the family called in consultation two other doctors who did not condemn what was being done for the limb but suggested the X-ray examination. Dr. Fisher told the people this was an unnecessary expense and would make no difference in the treatment. In due time the boy was well and discharged but with a shortening that required a thick soled shoe to prevent limping. Then complaints began to come that the doctor had not done his duty. Different doctors were called in to examine; all found shortening, varying from a trifle over one-half to one inch.

The X-ray was applied and a skiagraph taken; a plate showing the femus to be thirteen inches in length was brought into court; this measurement was longer than the well leg. The fractured femur actually measured less than twelve inches, showing that X-ray pictures to be of value have to be interpreted.

Finally suit was brought against the doctor for malpractice and damages to the amount of $10,000.00 demanded; the jury disagreed. Then a second suit was brought and the evidence presented, the judge gave his charge and the jury brought in a verdict against the doctor for the sum of $2,375.00; just why it was that exact amount and not $10,000 or $137.50, no one, so far as I know, has been informed and if we are to remain ignorant of the particular principles of law and justice by which they determined the amount of damages, we shall likewise be kept in darkness regarding the source of knowledge that enabled them to decide why the doctor should be mulcted to any extent. All the medical evidence was favorable, the charge of the judge also was favorable to the doctor, but nevertheless, the jury decided the doctor should pay the poor boy something anyway. To the most casual observer, to the mere onlooker, it would appear that the wheels of justice had slipped a cog. While such things are possible, how can the doctor hope for justice when he is haled into court? Are we to believe that a popular prejudice or public sentiment, like a strong tide sets against the doctor in court?

From olden times, when the barber was the doctor or surgeon and came with his spring lancet to bleed and his big syringe for clyster, he was held up to ridicule by the caustic writer and caricaturing artist. Even now, in our modern plays, the doctor is more often presented on the stage as a kind of freak; the funny man in the show must always tell a joke on the doctor. The last time I went to Keith's, he convulsed the crowded house by so tame a conundrum as "Why was a doctor once come into the house, like bad teeth? Because they were hard to get out." Surely no great wit, but a popular cord seemed to be sounded and the sentiment was against the doctor. Why there should be any feeling of animosity against the doctor, I can scarcely understand. Spending his life, as he does so largely, for the benefit of others; giving his services for years to public and private charities; exposed at all hours and in all kinds of weather to disease, danger and death; spending his time

with the unhappy, the discouraged and despondent, bringing them in exchange for their long tale of woe, encouragement and hope for better things, but in return for these hard tasks—dirty, disagreeable, unsavory jobs—receiving very little remuneration and often none whatever.

If you talk with the average juryman, he will tell you the doctor is rich, the doctor has an easy time, doesn't have to work, just rides about, makes his money easily, has a good home, good clothes and a good time in general. He will tell you the doctor can get along without what little he owes him, the doctor doesn't need it. This average juryman cannot enter into or appreciate the peculiar trials, anxieties and exacting duties that fall to the lot of that same overworked doctor, who is still plodding on, Sundays and holidays, not able to complete his arduous duties in eight, ten or twelve hours, but is still watching patiently by the sufferer's bedside, it may be all night, while the envious juryman lies snoring in bed.

Has the doctor's opinion, knowledge and experience the due respect and regard in court, shown other experts? How many times do we see disgraceful bulliragging of a medical witness by the lawyer; and right here, may not the profession be in part to blame for not standing together in upholding its honor, but on the contrary, uniting with the lawyer in heaping reproach and casting reflection and doubt upon what has been said and done by a fellow practitioner. An engineer, a contractor and builder, or an artisan of any trade may give information of his calling and it is listened to with attention and respect, while his statements are given due weight in reaching a verdict. But what juryman is ready to admit that the doctor knows more about these matters than he does himself? He will cheerfully tell you that an old potato carried in the pocket is better for rheumatism than all that the doctor knows; that his grandmother with a few roots and herbs knew more about curing people and could do better work than all the doctors; or he will contemptuously tell you, naming this doctor and the other, that they don't know anything and he wouldn't have them to a sick cat. You hear these people who form our juries commonly making such remarks; no one ever hears them rebuked, it all seems to be taken for granted. As if they had such superior knowledge and were so competent to decide whether the doctor had or had not conformed to the laws of nature and properly applied the rules of science to that particular case. And shall the doctor be dragged into court and have his skill and knowledge passed upon by such as these?

If an army or navy officer is charged with unprofessional conduct or failure to properly perform his duty, who is allowed to decide if he has done well or ill? Do they make up a jury of the illiterate and untrained, of hod-carriers and peanut venders? You know how absurd that proposition seems. He is tried by his peers, his brother officers, who know what he should have done and are competent to determine if he did the best could be expected under the circumstances. If he was an engineer or the captain of a boat, then there will be engineers and captains among those who decide, those familiar with the duties required. Does the doctor ever have those on the jury who are familiar with the requirements of his calling, competent to decide on the merits of the case?—*Providence Med. Jour.*

MEDICAL NEWS AND ITEMS.

Smallpox prevails in many parts of the Carolinas.

A Chinaman died of plague on November 6th on a river steamer near San Francisco.

Dr. Edward Thomas, of New Bern, N. C., died suddenly on the streets of New York city on February 4th.

Dr. J. C. McKenzie has located at Parkton, N. C.

Dr. A. F. Williams, of Kenansville, N. C., has decided to locate in Wilson, N. C.

Ice can be noiselessly broken by using a hat pin. This is an excellent sick room suggestion.

Dr. Robert A. McLean, a venerable and beloved physician of Lincoln county, N. C., died at his home during the last days of January.

Dr. J. W. Jones, of Tarboro, died at the residence of his son, Mr. Paul Jones, in Tarboro, on January 28th, in his 73d year.

Rowan County Medical Society held its mid-winter meeting a short time ago and was treated by its genial president, Dr. J. S. Brown, to a banquet.

M. Blanche has been employing the tincture of aconite with benefit in the diseases of children, especially in catarrhal and spasmodic diseases of the respiratory apparatus.

Gelsemium is often useful for the fear that precedes an operation. If this fear is pronounced it may become a serious complication, for fright not only increases the danger of an anesthetic but retards convalescence.

Dr. James Sawyer, of Asheville, N. C., ought to be a happy young man. The Asheville *Citizen* presented him with a fine gold watch as the result of a voting contest among its readers to determine the most popular business or professional man in Asheville.

The Board of Medical Examiners of North Carolina will meet in Raleigh on May 18th, and the State Medical Society will meet May 24th. Get your papers ready brethren, and let us have a good meeting.

The death-rate from pulmonary tuberculosis in New York city has fallen, since 1881, from 4.2 per 1,000 to 2.29.

Pneumonia has prevailed to an alarming extent this winter in many places along the Atlantic seaboard and in the middle west.

Sharp and Dohme's Laboratories Not Injured.—The recent fire in Baltimore which destroyed such a vast amount of property as to render it a national calamity, at one time threatened the laboratories of Sharp and Dohme, and it is with genuine pleasure that we report the firm's escape without any damage whatever.

The Tri-State Society Meeting.—The preliminary program of this meeting which will be held in Danville, Va., on February 23d next, is in our hand, and is quite elaborate. Nearly 50 papers are promised, many of them by doctors whose opinions are always worthy of the closest consideration. From present appearance, this meeting promises to be the best the society has yet held.

High Death Rate in Philadelphia.—For the week ended January 16th there were reported to the Philadelphia Bureau of Health 736 deaths, the largest number in any week for three years. More than 25 per cent. of the entire number were due to acute affections of the air passages, including the lungs. There were from pneumonia 93 deaths and from bronchopneumonia 37 deaths and 12 deaths were attributed to congestion of the lungs.

(*Continued on Page 138*)

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The Legitimate Therapeutic Use of Alcohol.

Osborne considers in succession the following indications for the use of alcohol: (1) Local; (2) to stimulate the heart; (3) as a food; (4) to increase the appetite and aid digestion; (5) to relieve acute internal congestion; (6) to relax and dilate the periheral circulation; (7) to produce sleep, and (8) to combat poisons in the system. We call attention to only a few points in the author's paper. It is the author's belief that the contact of strong alcohol with the mucous membranes of the mouth, oesophagus, and stomach acts reflexly through the medulla to cause vasoconstriction, which raises the blood pressure, and hence stimulates the heart. After alcohol is absorbed (it circulates as alcohol) it causes vasodilation and a fall in blood pressure. It is certain that overdoses of alcohol after absorption are depressant to the heart muscle, to the muscle fibers of the blood vessel walls, and to the vasomotor center in the medulla. On these considerations the author bases his advice on the use of alcohol in derangements and affections of the heart. With regard to the utility of alcohol in combating poisons circulating in the blood, clinical experience is not conclusive. Laboratory experiments should be undertaken in order to settle this point.—*New York Medical Journal.*

In a discussion of this subject, O. T. Osborne states his belief that alcohol as a nutriment is uneconomical to the system, and if long used is a positive disadvantage, probably even sugar being better when the amount of food obtainable is too small for the needs of the body. During feverish processes, however, as a nutriment to furnish material for the production of heat to save the tissues, fat, and muscles, it is of decided advantage and probably has no equal, if in such fevers not enough nutrition is taken. Undoubtedly at the present time many cases of fever are overfed. Whether whiskey or brandy should be given in every case of typhoid fever or diphtheria, or in the feverish debility of tuberculosis, or in other acute infections, is a question that each practitioner must decide for each individual case. Many such cases do well without it; many cases recover only by the use of it.—*Medical Record.*

Shoemaker recommends the following combination in the treatment of chronic bronchitis and pleurisy:

℞	Pot. iodidi dr. iv	15 \|
	Syr. ferri iodidi	
	Glycerini, aa..... oz. iss	45 \|

M. Sig.: One teaspoonful in water or milk after each meal.

Cystitis.

There is an advantage, according to *the Jour. de Med. de Paris,* in prescribing salol internally in the form of an emulsion instead of powder form in the treatment of cystitis. The following formula is recommended:

℞	Salol..... gr. xxx-dr. i	2-4 \|	
	Pulv. tragacanthae.....gr. ii		\| 12
	Pulv. acaciae.....gr. xxx	2 \|	
	Tinc. simp.....oz. ss	15 \|	
	Tinc. simp..... oz. ss	15 \|	
	Aq. destil. q. s. ad oz. ii	60 \|	

M. Sig.: Ft. emulsio. Sig: One teaspoonful before each meal.

The following is recommended by *Merck's Archives* in the treatment of cystitis:

To relieve the pain:

℞	Ext. opii gr. vi	\| 40	
	Ext. hyoscyami.....gr. v	\| 30	
	Olei theobrom. q. s.		

M. Ft. suppos. No. vi. Sig.: One to be introduced into the rectum at night.

Do We Really Need It?

Beef, Iron, Cinchona and Brandy go to make it. Any one of these given alone would do good. Consider, then, how much the benefit could be increased by combination!

> "The stimulant action of Extractum Carnis has been considered almost equal to that of alcohol, and bulk for bulk, it is certainly much greater. Two-fifths of an ounce of the Extract represents one pound of mutton." W. GILMAN THOMPSON.
>
> "Iron is a food—not a medicine. Of the value of iron in anæmia and chlorosis, there can be no doubt." H. C. WOOD.
>
> "Cinchona is extremely serviceable in atonic dyspepsia, gastric catarrh, adynamia, convalescence, asthma and chronic bronchitis." SAMUEL O. L. POTTER.
>
> "Alcohol is the savings bank of the system. He who eats little and drinks alcohol in moderation retains as much nutrition in his blood and tissues as he who eats more and drinks less." MOLESCHOTT.

It isn't a question of merit—we don't ask, "Is it good for something?"—but rather one of superiority—"Is it better than any other thing?". Every one of us knows the value of Beef, Iron, Cinchona and Brandy; but Colden's Liquid Beef Tonic is worth "all put together." Its powers have been tested and its virtues demonstrated by thirty years of severe clinical experience. It's known too widely now to need further introduction—we wish merely that you renew the acquaintance if forgotten. We provide the profession with two distinct preparations: "Ext. Carnis Fl. Comp. (Colden), Formula No. 1, with Iron; and Formula No. 2, without Iron." Sold by druggists generally.

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Treatment of Chronic, Atrophic Gastritis.

Robin, according to the *Bulletin general de therapeutic* for July 23d, advises for the obstinate vomiting.

℞ Picrotoxine..5 centigrammes (¾ grain)
Alcohol.....enough to dissolve;
Morphine hydrochloride 5 centigrammes (¾ grain);
Neutral atropine sulphate..1 centigramme (3-20 grain);
Ergotine..... 1 gramme (15 minims);
Distilled cherry-laurel water...12 grammes (8 drachms).

M. Five drops before each drink of milk; not more than twenty-five drops in the twenty-four hours.

For the pain liable to follow ingestion of milk:

℞ Calcined magnesia } of each . 4 grammes
Sodium bicarbonate } (1 drachm);
Prepared chalk 6 grammes (1½ drachms).

M. Divide into 12 powders; one at a dose.

If this does not relieve, take along with the milk seven grains of pepsin and a pill or two of pancreatin, keratinized.

For constipation, hot water, a quart with the addition of ten drops of tincture of sage, should be taken fasting; if that is not sufficient, try the following pill:

Rx Socotrine aloes.....6 centigrammes (9-10 grain);
Gutta Percha.....3 centigrammes (9-20 grain);
Extract of belladonna } of each
Extract of hyoscyamus } 5 milligrammes (3-40 grain)
Extract of licorice....10 centigrammes (1½ grains).

M. Dose, one to three such pills.

If, instead of constipation, there should be diarrhoea, a small cupful of hot infusion of the root of the wild strawberry or simaruba may relieve; if not, try the following:

Rx Dioscorea root } of each 4 grammes
Bismuth subnitrate } (1 drachm)

M. Divide into 16 boluses.

New York and Philadelphia Medical Journal.

SUPERIOR TO THE BITTER ELIXIRS AND FAR MORE RELIABLE THAN THE SWEET SYRUPS OF QUININE IS

Quin-I-Pep-tone

Quinine, Iron and Pepsin Tonic.

Containing as it does the three sheet anchors of therapeutics, stamps it the Ideal Tonic—

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Literature Free on Request. **Supplied by all Druggists.**

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A new naval camp for the treatment of tuberculosis will be ready for occupancy at Pensacola, Fla., in the near future. So far only one patient has applied for admission. Several prominent physicians have recommended Pensacola as a resort for the tuberculosis and Surgeon-General Rixey decided to make the test. This class of patients in the navy is at present sent to the Army General Hospital at Fort Bayard, N. M. At the new camp, the open-air and forced food treatment will be instituted; patients will live in tents day and night and will not be allowed to go into the hospital or other buildings on the reservation.

Our readers will note with satisfaction the change in the advertisement of the Illinois School of Electro-Therapeutics, appearing in this issue. The former secretary, Mr. A. B. Slater, has disposed of his entire interest in the school to Dr. W. H. Knap, which will insure its being operated upon an exclusively educational basis, and bring to its support the influence of prominent men and others interested in the advancement of Electro-Therapeutics. The school now in its fifth year is the only one of its kind where thorough instruction in this important branch is given, and physicians intending to take up this work will do well to write them for information.

An exchange says: "The assuring news comes through consular sources that vaccination is effective against the historic plague. In Hong Kong, where superstition prevails, the efforts of the authorities to stamp out the trouble have been ineffectual, and the scourge is unabated. On the other hand, in Manila, where preventive vaccination is compulsory and carried out conscientiously on a large scale, the plague is almost stamped out. It is asserted that the vaccination in use there, if repeated at intervals of ten days, is as certainly effective as vaccination against smallpox."

The Antiseptic Age!

This is undoubtedly the Antiseptic Age in Medical history, and many are the chemical agents used as "Antiseptics." The "deseradatum" is an agent that is convenient, harmless and low in cost; one that will destroy germs of disease and gently stimulate tissue repair.

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Sold at one-half less than other antiseptic powders of no greater antiseptic value.

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Fills all these indications. It is destruction to pathogenic bacteria and at the same time mildly stimulating and astringent, thus promoting rapid healing. It is not a specific, not a cure-all, but a valuable addition to the intelligent doctor's list of curative agents. Drop a postal for trial package to

Leukretol Chemical Co.,

Winston-Salem, N. C.

A jury in the Lord Chief Justice's Court has awarded Dr. Bayliss, a professor of London University College Hospital, $10,000 damages for libel against Hon. Stephen Coleridge, honorary secretary of the National Antivivisection Society, and son of the late Chief Justice Coleridge. Mr. Coleridge publicly charged the plaintiff with torturing a dog while carrying out vivisection experiments without proper anesthetics. Mr. Coleridge's charges rested on the statement of two Swedish women students, who gave a horrible picture of the laboratory of the college and the inhumanity of the operators, dogs howling in agony from the tortures inflicted on them while they were fully conscious. Strong evidence was submitted against the allegations.—*American Medicine.*

Transactions of the Hot Springs Meeting.—We are in receipt of the transactions of the last session of the North Carolina State Medical Society and we are constrained to say it is the largest and handsomest volume the Society has ever issued. This volume will be of especial value on account of the full data given of the medical laws, regulations of Board of Examiners, etc.

Recommends Discontinuance of Appropriations.—The Board of State Aid and Charities of Maryland, in its report to the legislature, recommends that the appropriations to the medical schools be discontinued, also those to the Baltimore University Hospital, Franklin Square Hospital, attached to the Maryland Medical College, and the hospital of the Woman's Medical College.

Several patent medicine companies in Kalamazoo, which have manufactured and exploited alleged cures for consumption have recently discontinued business, the reason given for the closure being pressure said to have been brought to bear by the United States government for fraudulent use of the mails.



The Crowell Sanitarium

FOR THE TREATMENT OF

Morphine, Alcohol, Tobacco and Drug Addictions.

Special apartments and nurses for lady patients; massage and electricity when indicated; treatment strictly private and confidential; no suffering nor ill effect in treatment. DR. S. M. CROWELL, Medical Director, 8 West Third Street, Charlotte, N. C.

To Restrict Spitting.—A committee, appointed by the Washington County Medical Society of Maryland, has petitioned the mayor and council of Hagerstown, Md., to placard the street corners, public buildings, street cars and other places frequented by the public, with notices requesting the people not to spit on the sidewalks and floors. The passage of an ordinance imposing fines for spitting will not be recommended at present, but it is hoped that the placards will educate the people to expect the passage of an ordinance later. The matter has been referred to the city sanitary board, which is expected to take the action requested by the medical society.

A New "Doctorate."—The coroner of Philadelphia recently investigated a fatal case of diphtheria, which was said to have been attended by a man who called himself a "ceropath." When the department had been notified of the fact by a regular practitioner, it was found that this "doctor" had the letters D. S. T. after his name, which was explained by him as meaning "Doctor of Suggestive Therapeutics."—*N. Y. Med. Jour. and Phila. Med. Jour.*

A novel institute has been founded at Rouen. A wealthy Frenchman left a large fortune to be used in propagating a race of giants. It is proposed to maintain in this novel institute a score or more of giant couples, establishing workshops for them and conditions favorable for scientists to observe the result on the progeny of giant couples.

Plague is again epidemic in Hong Kong. During the first five and a half months of last year there have been 1,184 cases, with a mortality of 90 per cent. Only a few white people have been attacked and of the 25 cases which have occurred among Europeans only 4 have been fatal. Whites usually suffer from the pneumonic form of the disease.

Atonic Conditions and Their Therapy.

Lafayette Bennett, M. D., Central City, Ky.

Consequent upon acute disease processes we have almost invariably an atonic condition. A clinical analysis of this state will reveal more or less tissue waste and anaemia, and general systematic debility.

It is the custom of many physicians to allow this condition to go along without treatment. In many instances this will be followed with a slow but steady return to health, but the fact that a considerable percentage of these patients recover without scientific treatment is no logical reason why proper medication should be withheld.

In fact it is reasonable and advisable always to put out convalescents on such treatment as will bring about tissue repair and correct the consequent anaemia. This insures not only a speedy return to normal conditions, but it also fortifies the patient against many other disease attacks to which a debilitated and anaemic patient is liable.

To readily fortify these patients against further disease attacks by reason of debility and anaemia I begin as soon as the acute disease is spent to correct its effects on the system.

Cod liver oil by common consent, is the best constructive we possess. It more quickly corrects tissue waste and the consequential anaemia which follows acute disease than any remedy we possess. Cod liver oil, however, is too indigestible and too offensive to the palate to use in these enfeebled patients.

For this reason I give Hagee's Cordial of Cod Liver Oil Compound. It is pleasant to the palate, readily assimilated, and the patient makes rapid improvement when this agent is given with regularity. I have never found a patient that disliked it or who thought it repulsive to the palate. It has never failed to bring me prompt results.

Mr. S., age 29. This man, a painter by occupation, had an attack of remittent fever, and was treated for it in the usual way. He failed to regain his strength and was pale and debilitated. I put him on Hagee's Cordial of Cod Liver Oil Compound in doses of a tablespoonful. On this treatment he made a rapid recovery. He has regained his customary weight and has good digestion and is in every way in excellent health.

Mrs. F., age 19. This lady had childbed fever, and on recovery from this was emaciated and anaemia. I put her on Hagee's Cordial of Cod Liver Oil Compound in doses of a tablespoonful four times daily. On this treatment she speedily recovered.

Mrs. W., age 50. This lady had an attack of pneumonia that had been most trying on her. She was weak, had no appetite and was nervous and in a great state of mental depression.

I assured her that she need have no doubts as to the outcome of her disease if she would persevere in her medicine —she was put on Hagee's Cordial of Cod Liver Oil Compound in doses of a tablespoonful four times daily. This lady made a satisfactory recovery in a remarkably short time.

Cough and Restlessness in Pneumonia.—Dr. W. J. Parker truthfully states in the January *Medical World* that "The season for pneumonia is here" and it may be of interest to our readers to know that he has found an excellent remedy for the cough and restlessness which are such distressing symptoms of this dreadful malady in antikamnia and heroin tablets. Each of these tablets contain five grains of antikamnia and 1-12th grain heroin hydrochloride and

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Write us for our Catalogue.

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the dosage is one tablet every two or three hours according to the exigencies of the case, or at the discretion of the attending physician. We may also add, that professor Uriel S. Boone) of the College of Physicians and Surgeons, St. Louis, also reports most satisfactory results with this remedy in pneumonia, bronchitis and la grippe, particularly in relieving the accompanying spasmodic coughs and muscular pain.

A Remarkable Cure of a Remarkable Case.—(By Dr. G. H. F. House, M. D., ex-President of Indianapolis Board of Health, Indianapolis, Ind.)—I have just had such a remarkable cure that I feel it my duty to report it. November 20, 1903, I was called to see Mr. B., age seventy-three years; kidneys congested; bladder irritable; only one ounce of urine passed in thirty-six hours; both legs three times their normal size; abdomen full of water; heart action bad; difficult breathing. Tested urine, but found no albumen; urine full of pus, blood, urates and phosphates. Put him on Sanmetto and digitalis; punctured the legs (and they have dripped gallons of water—thought he would die). After six days, slight improvement. Kept up treatment, and at this date, January 13, 1904, the swelling is gone and the breathing easy, urine nearly normal, appetite good, and almost well. He is now on the eighth bottle of Sanmetto. It is the most remarkable recovery I have had in twenty-seven years' experience, and I am compelled to give Sanmetto the praise. It is a grand medicine.

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Not unless the meal was served upon a table so arranged as to extend over the bed, and still not touch it. Most convenient in the sick room. Excellent sewing, cutting and reading table. Adjustable. Various kinds of wood. Beautifully finished.

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Barred Under Pure Food Law.—Since the Pure Food act of March 3, 1903, went into operation nine importations of food products into the United States have been rejected and refused entry. These include three invoices of olive oil and one of wine from France, a consignment of Frankfurter sausage at New York, shipments of olive oil at Boston and Philadelphia, Sauterne wine at Baltimore, and coloring matter at San Francisco.

DON'T LET YOUR PNEUMONIA PATIENTS DIE.

Let the Nihilist Rage and, Like the Ancient Fool, Suffer for His Folly

PNEUMONIA CAN BE ABORTED

(CITO TUTO ET JUCUNDE)

IT'S ONLY NECESSARY TO KNOW HOW AND DO IT

THE ALKALOIDAL TREATMENT OF PNEUMONIA.

In full-blooded patients begin with aconitine, veratrine and digitalin, one of each every fifteen to thirty minutes until pulse softens; then every half-hour to one hour. Keep the pulse at 80 or under if possible; envelop the entire thorax in a thin jacket thickly "quilted" with raw cotton or the common cotton "batten" *well greased* or spread thickly with one of the standard osmotic glycerinized pastes, and applied *thick* and *hot*; in severe cases renew dressing every twelve hours; give a few doses of bryonin, or hyoscyamine and codeine, for pain. Clean out the *prima via* with 1-6 gr doses of calomel and podophyllin, half-hourly, till a grain of each is taken; two hours after last dose give a heaping teaspoonful of Saline Laxative in hot water and repeat every hour till bowels move freely; then give 5 grains of the Compound Sulphocarbolates—"Intestinal Antiseptic, W-A" every two hours, or enough to keep the bowel sweet and clean. This is of the utmost importance. *If seen early and properly selected remedies are pushed rapidly, nearly every case may be aborted.* If patient is naturally weak, give strychnine arsenate in place of veratrine. Codeine may be used to quiet cough if required, and emetine to facilitate expectoration; cactin for prompt relief of heart waverings. Secure complete defervescence and rest, no matter how much drug is required. Nuclein Solution should be given in doses of twenty drops three times a day, taken on the tongue *without water*. Leave patient on strychnine arsenate, or Triple Arsenates with Nuclein, and use the Saline Laxative and Intestinal Antiseptic, q. s., throughout the case, and following, as required.

The gist of the whole thing being, local protection, elimination, with forced defervescence, intestinal disinfection, systemic disinfection and strong support to nature's fighting forces.

The above is a crystallization, from the successful treatment of a multitude of cases—a treatment which has been verified and adopted by thousands of America's finest practicians as a sheet anchor that rarely lifts.

Doctor, if you will test this treatment for yourself, send one dollar and we will at once send you, prepaid, enough of the remedies recommended for internal use to treat several cases. Money back if not satisfied.

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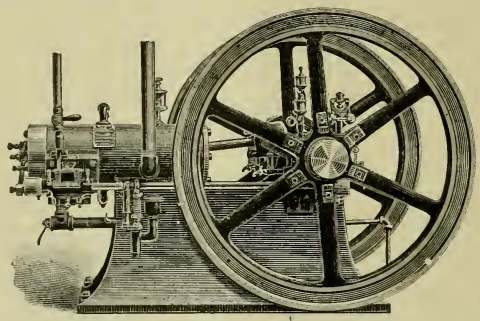
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"I find your Concentrated Iron and Alum Water an excellent tonic and general constitutional invigorator."—*D. C. Parris, M. D., Hillsboro, N. C.*

Elixir Maltopepsine with Glycerophosphates

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Antiasthmatic. Useful in all spasmodic respiratory diseases as Asthma, Hay Fever, Croup, Laryngismus Stridulus, Whooping Cough, etc.

An ideal digestive and nerve constructive tonic of universal applicability in all wasting diseases and nervous disorders, with faulty digestion, stomachic or intestinal. Furthers assimilation and growth of bony tissue. Each fluid dram contains: Glycerophosphate Calcium gr. 1; Glycerophosphate Soda grs. 2; Glycerophosphate Iron, grs. 3-16; Glycerophosphate Mangase gr. ½i Glycerophosphate Strychnine, gr. 1-60; Maltopepsine, grs. 10. In dram doses is economic to dispense — very prompt results.

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Has Radium Been Found in This Country?—It is announced that Professor Alexander H. Phillips, assistant professor of mineralogy of Princeton University, his discovered radium, the wonderful new substance now valued at over $2,000,000 a pound, in carnolite, an ore found in Utah and possibly in other of the Rock Mountain States. The Princeton professor has found on experimenting that from 25 pounds of carnolite a sample of radioactive barium chloride can be obtained which will give about 1,500 activity, as compared with 7,000 activity in the element obtained from European ores. A company has been formed to place the new product on the market.

"I have used Hargrave's Iodoform Vapor in cases of nasal and bronchial catarrh with decided benefit, and can heartily endorse it in affections of that character."—*G. L. Wimberly, Jr., M. D., Rockymount, N. C.*

Smallpox Victims Dying From Neglect in Delaware.—Woodland, a village six miles from Laurel, is suffering from a smallpox epidemic, and so strictly is the town quarantined that of the ten deaths which have occurred, eight are said to have been due to absolute neglect and starvation. The president of the Laurel Board of Health appealed to the State Board to send aid to the stricken town, and was informed that no funds were available. Only one family in the town has regular medical attention, the other victims being too poor to guarantee pay. Meetings were held in the Laurel churches, and money collected for relief purposes. There are 35 cases in a population of 100. The suburbs of surrounding towns are patroled to prevent refugees from Woodland entering.

Indicted for Selling Peruna.—We are informed that the grand jury found true bills against several parties for selling peruna. This article, peruna, is

extensively advertised as a medicine and is sold all over the country, but it seems to be intoxicating, and the grand jury is making no compromise with intoxicants.—*Coffee County Ga. Gazette.*

New Pasteur Institute at New Orleans.—Before the end of December New Orleans will furnish the people of that vicinity with the Pasteur treatment for rabbies without cost, something not done by any other city in the world. The definite announcement of the opening of this new department of the Charity Hospital was made recently at the regular meeting of the board of administrators of that institution.

Iodized Lime: Calcidin.—The "Iodide of Lime" or "Calcuim Iodide" have long been known, and the books suggest the use of this agent in croup. It has remained for Dr. W. C. Abbott to invite the attention of the profession to "Calcuim Iodized" (Calcidin, Abbott) as being the agent of value in this particular. Iodized Calcuim is an amorphous compound body which contains an excess of iodine loosely combined with the lime. This iodine, on coming in contact with acid, is freed from its loose combination with the lime, as free as nascent iodine, to do its absorbing, alterative work.

Clinical experience with this agent—the *true* Iodized Calcuim, (Calcidin, Abbott), in croup—true and false—has demonstrated its great value, and the doctor who uses it in this class of cases will not be disappointed.

"I have used your vapor of Iodoform in various cases of catarrh and bronchitis for several years, and conclude that it is the most efficient preparation I have ever tried.—*C. B. Walton, M. D., Saratoga, N. C.*

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That the crude, resinous oils, which are now foistered upon the profession, may not be mistaken for our product (essence of the leaves of the plant), we state it is proved by tests made by medical clinics, that only products that are saturated with oxygen and freed of acids, resinous and other substances adherent to primary distillation, will develop the curative preperties possessed by the plant. These crude oils—now in use for mechanical purposes—are discernable by (1) their deficiency in pungent odor (which our product develops most freely through its surplus of oxygen); (2) their alcoholic, thin and mobile appearance, being reduced in specific density through the presence of acids; (3) their taste, the result of the counteracting tendency of resins and tannates.

To avoid the injurious consequences that result from substituting these crude commercial oils in croup, bronchitis, diphtheria, dysentery, internal inflammations, etc., we beg when prescribing to specify our product and to insist on getting it.

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Successfully used for removal of CAPSULAR and LENTICULAR CATARACTS, CORNEAL OPACITIES.

Does not cause Inflammation.

Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy :

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis : gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr. Osmon Royal, under date of June 4th 1903, writes :

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E. V. Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

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The New Antitoxine Packages.— The domestic manufacturers of antidiphtheretic serum have agreed to discontinue the manufacture and sale of the weaker diphtheria antitoxine, heretofore referred to as "X" or "Standard," and also of the concentrated form, formerly referred to as "XXX," and will hereafter place on the market only one strength corresponding to that now known as "Concentrated" or "XX" serum. The making of the 500 unit and the 1,500 unit package will be discontinued, and hereafter all American antitoxine serums will be put up in packages containing 1,000 units, representing the immunizing dose, 2,000 units representing a small curative dose, 3,000 units, representing a moderate curative dose, and 4,000 units, representing a full curative dose of the serum. The change will make for simplicity and uniformity. The reason assigned for the discontinuance of the marketing of the 500 unit package is that while that was intended for use as an immunizing dose, it has not turned out to be absolutely reliable. Based upon these changes there has appeared in various daily journals a highly colored and somewhat hysterical denunciation of what the newspapers have chosen to designate "the anti-toxine trust," the phraseology of which betrays a complete ignorance on the part of the writers of the subject treated. As a matter of fact, taking the curative unit as a basis for quotation, the prices asked on the new schedule are less than those formerly charged by the manufacturers. To the newspaper writer, however, a serum is a serum and nothing more, the question of strength, which is the all important question, being to him a matter in which he is not interested.

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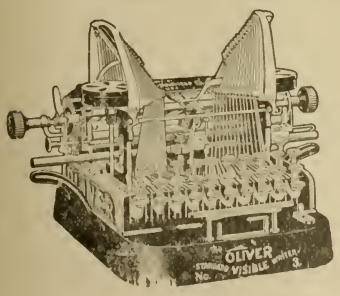
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To Discuss Yellow Fever Quarantine.—State Health Officer G. R. Taber left Austin recently for Washington, D. C., to confer with Surgeon-General Wyman, of the United States Marine Hospital Service in regard to quarantine matters, with a view to co-operating in the efforts to prevent yellow fever entering Texas from Mexico next season. Dr. Wyman, Dr. Taber, and the Health Officers of other Southern States will visit Mexico next month to make a personal investigation of the yellow fever situation in that country.

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The Late Dr. Cyrus Edson.—At a meeting held January 12, 1904, the Medical Board of the Willard Parker and Riverside Hospitals adopted a resolution to the effect that "In the death of Dr. Cyrus Edson the profession has lost a broad-minded physician and a progressive and scientific sanitarian, who labored with tireless energy, intelligent effort, and marked executive ability in the office of Commissioner of Health and the subordinate offices in the health Department which he held before he attained the commissionership." And also that "The Medical Board holds in affectionate remembrance the uniform courtesy and kindness of which each of the visiting staff of these hospitals was the recipient during Dr. Edson's administration of the Health Department. Ever ready to discuss projects for the walfare of the hospitals, he gave them full consideration and approval, if possible, and the aid of his executive power in their accomplishment."

Smallpox Epidemic in Small Town.—From Washington, Pa., under date of December 10, comes the news that the village of Time, just over the line in Greene county, is in the throes of a terrible epidemic of smallpox, which has developed with wonderful rapidity. There are about a half hundred acres of the disease, and scarcely a family in the district is free from the scourge. The disease made its appearance about three weeks ago, and was diagnosed as chickenpox. The contagion spread rapidly, as no quarantine was placed on any of the patients. The physicians decided, however, that it was smallpox, and a quarantine on the town was at once established.

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Deluded Spangler.—News from Altoona, Pa., under date of December 10, says: An epidemic of smallpox exists at Spangler, a mining town on a mountain, where the people are opposed to vaccination, and 33 cases are reported. Physicians went to the public schools recently to vaccinate the pupils, and the teachers locked the doors, refusing to admit them.

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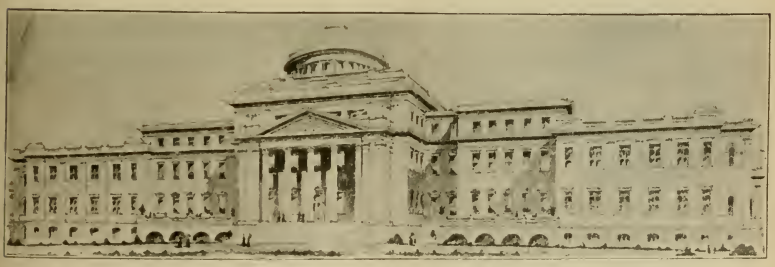
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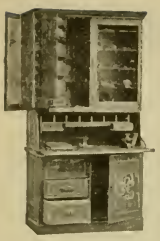
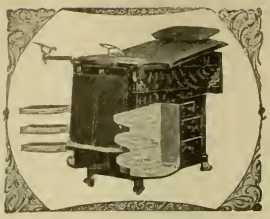
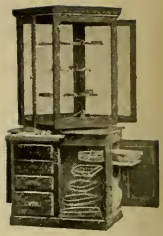
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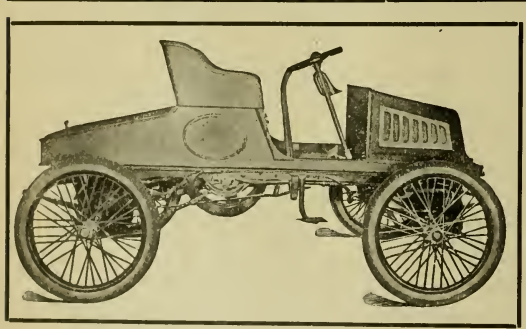
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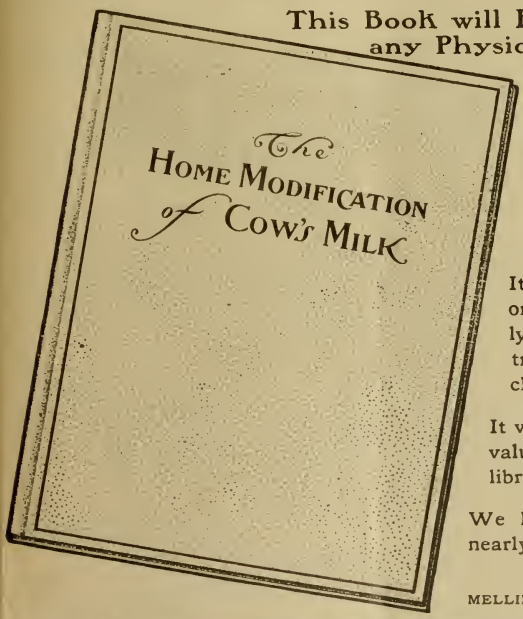
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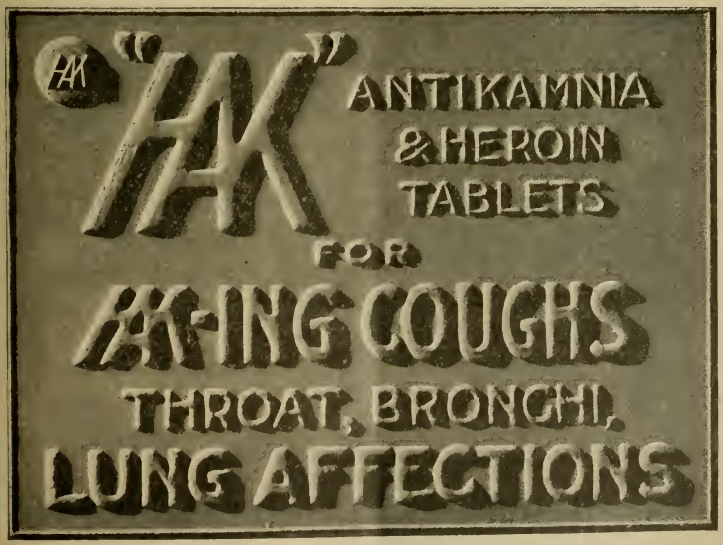
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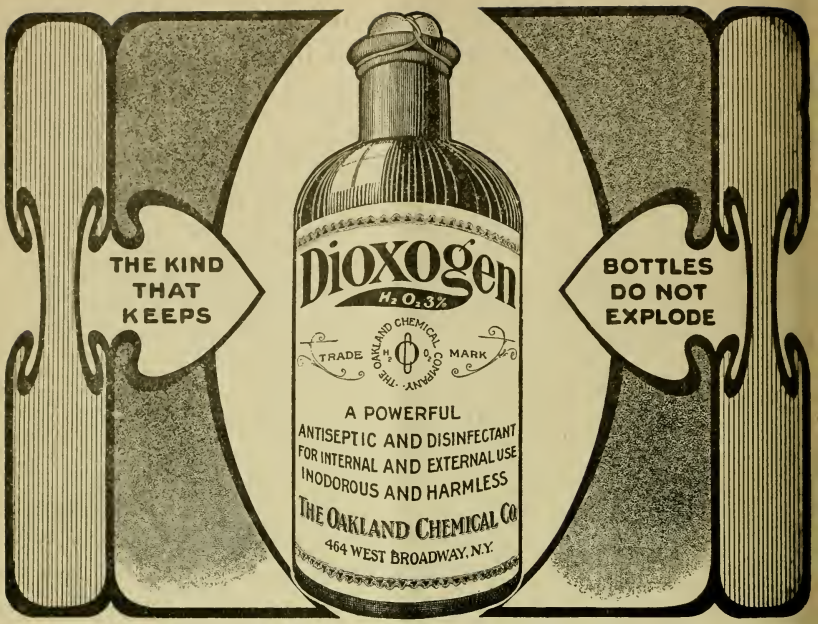
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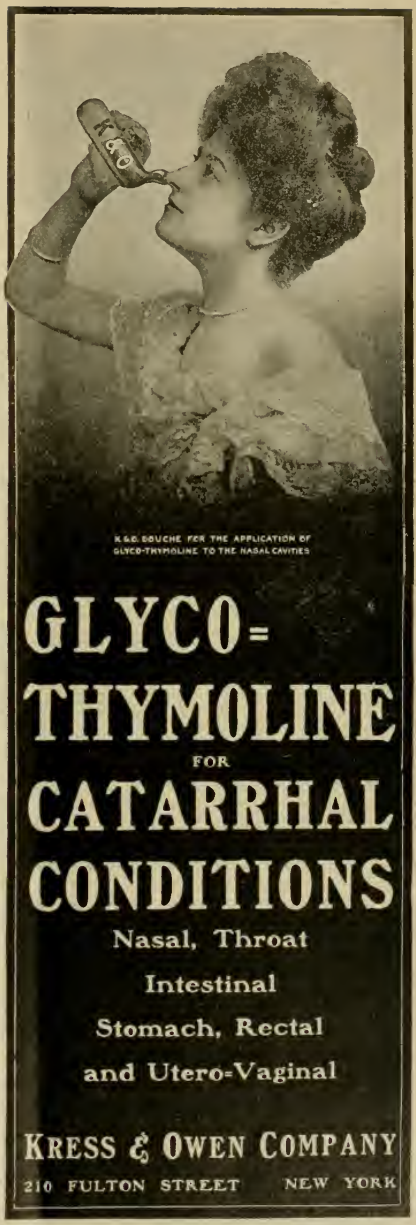
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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Painless Circumcision.

By W. Hosea Moss, M. D., Charlotte, N. C.

The writer by no means wishes to intrude upon the time of the medical profession by going into details of the operation of circumcision, as it is presumed that every surgeon thoroughly understands the technique of the procedure.

However there are some practical points which I wish to mention which have been of invaluable benefit to me.

Circumcision is certainly not practiced as much as it should be. Moses, the great law giver, was pre-eminently corect when he commanded this canon. Not only is it quite hygenic, but from my experience, as well as from the observation of many physicians, who treat a vast number of venerial diseases, the majority of these patients have long perepuces, which almost invariably invites complications.

Of course, the operation is quite ancient and has been performed in many ways. I treat it as a true surgical operation. I do it at all times under strict asepsis. I prepare the field just as carefully as for an abdominal operation, and always use cocaine as my local anæsthetic. I have never scored a single failure in securing absolute anæsthesia. thereby doing entirely away with the use of a general anæsthetic for which the laity has such an antipathy.

The average physician, on the other hand considers the operation as insignificant, attaching no importance to the technique, simply "cuts away," trusting to nature for a final adjustment of the parts severed, healing up sometimes quickly; again, requiring many weeks, and when healed has the appearance as though it had been chewed off by a cat, and frequently leaves irreparable damage to the urethra and penis; therefore, circumcision should be performed by a surgeon.

Valentine, citing Bergson, Ploss and Jelly, shows that this operation was performed by the ancient Egyptians and Phœnicians. To-day ritual circumcision is done only by Jews, Mohammedans, and a number of savage tribes.

The American and Russian Jews cut

off the perputial integument with a small knife, and tear the mucous fold with the fingers. The knife may injure the glands and the part of the urethra it contains; efforts to split a firmly adherent mucosa with the pulp of the index fingers and thumb nails may tear open the fossa.

In Germany and Hungary, so I am informed, many ritual circumcisers maintain the right thumb nail long and trimmed for the operation; others use a silver ring-shaped attachment, with a flat finger nail-like projection, to slip over the thumb when the operation is performed.

At least one of the native tribes, Los Lacantunes, of that region of Guatemala that has been but partly explored, use an obsidian for the same purpose.

Ramon Guiteras is of the opinion that stricture of the meatus is most frequent with those circumcised in infancy.

Every physician who has circumcised many infants knows that the lips of the meatus are found pouting. As the ritualistic circumcisers cut or pinch off the foreskin close to the meatus, it is readily appreciable how they can remove with it a part of the pouting lips. The resulting cicatrix naturally contracts and so produces the stricture. Among those who present no contracting of the meatus, slight radiating marks suggest the possibility of a small tip of the meatus having been removed.

Disregard for asepsis in ritualistic circumcision has caused many, and among them devout Jews, to inveigh against the operation. Erysipelas, syphilis, and tuberculosis are frequently reported in support of this objection. It France, a sanitary law was passed at the beginning of 1899 prohibiting circumcision, except it be in the presence of a physician. While the intent of this law is manifest, its execution is likely to fall far short of its purpose, as it must be evident to those who, from sad experience, know the difficulty of securing asepsis in even trained assistants and nurses.

Having had a large experience in performing the operation and meeting with such gratifying results to myself and patients, causing them absolutely no pain or loss of time, doing it without a general anæsthetic, is my excuse for offering this paper. Now a word about the local anæsthetic. Cocaine is the drug par excellence—the medium in which it is used, and the amount of the drug to be employed, is the point to which I wish to speak of definitely.

The average physician usually uses a 4 per cent. solution, which is wholly unnecssary.

I never use over a 2 per cent. solution, always diluting the solution with ar alkaline solution. Bicarbonate soda being the most convenient. I simply have prepared a 4 per cent. solution of cocaine, draw a drachm of the cocaine solution in a hypodermic syringe, add to that a drachm of the soda solution. The strength of the latter is in proportion to one drachm of bicarbonate of soda to eight ounces of hot sterile water. The cocaine acts better and quicker used in this manner, requiring only three minutes to produce complete local anæthesia.

Before giving my technique of the operation, I call your attention to the fact that in performing the operation of circumcision, it is necessary to remember that the prepuce is composed of two layers, separated by a cellular tissue of such lax texture as to admit of an almost indefinite amount of motion between them. The internal, or mucous, layer is firmly attached to the penis, posterior to the corona glandis, and hence is incapable of being drawn for-

ward to any great extent in front of the glans. The external integumental layer, on the contrary, is continuous with the flaccid skin of the body of the penis, and may be greatly elongated.

My modus operadi is as follows:

1. Thoroughly scrub the penis, and especially as much of the mucous fold of the prepuce as can be reached with soap and hot water.

2. Irrigate the preputial sac with hot potassic permanganate solution 1:6,000 until the fluid that flows from it is entirely clear.

3. Envelope the anterior four-fifths of the penis in absorbent cotton, soaked in mercuric bichloride 1:2,000.

4. Tie a rubber band as tightly as it can be drawn around the root of the penis. As brutal as this precaution against the hemorrhage may appear, it is quite painless, and its only result is some ecchymosis of the penis, which subsides in a few days.

5. Pass a probe as large as the preputial orifice will admit into the sac and sweep it around all its parts to ascertain if the prepuce is anywhere adherent.

6. Freeze a small part at the tip of the foreskin with ethyl chloride.

7. Inject into the frozen spot a few drops of above solution of cocaine and soda.

8. At the posterior margin of the bleb so produced inject another drop within the dorsal aspect of the prepuce to a quarter of an inch beyond the point where the elevated margin of the corona is felt through the foreskin.

9. Inject a similar line of drops following the line of the coronary margin until the region of the frenum is reached on one side Repeat this procedure on the other side.

10. Keep the syringe loaded for more infiltration, especially when the preputial orifice is so tight that the mucosa cannot be exposed.

11. Pinch up the dorsal aspect of the prepuce with the left thumb and index finger.

12. Insert the blunt arm of a pair of probe-pointed scisssors and carry it back as far as possible toward the corona. Drop the prepuce upon the blade of the scissors; inexperienced operators will do well to sweep to the scissors about under the foreskin, while the left fingers feel it, especially in infants, to be sure that the scissors arm is not within the urethra.

13. Draw back the skin and thus render it as tense as possible. Cut through the part of the foreskin that lies beproduce a large cut through the skin tween the scissors blades. This will produce a large cut through the skin and a disproportionately small cut into the mucosa.

14. Grasp the cut angles of the skin and mucosa with artery clamps; hold one in the left and give the other to an assistant. While the mucosa is thus intensely held infiltrate drops of the cocaine solution along the mucosa as far as possible in a line toward the corona. Cut the mucosa as far as this line goes. Repeat the line and infiltration in the part that is now exposed. Continue cutting and infiltrating to within three-eights of an inch of the corona.

15. Repeat the entire procedure along the lateral lines reaching from the dorsum of the prepuce to the frenum, on both sides, leaving a collar of mucosa three-eights of an inch wide. Let the prepuce then hang from the region of the frenum, to serve as a convenient handle for further manipulations. No bleeding, beyond a slight oozing, will interfere with the above steps, if the rubber band about the root of the penis has been firmly applied. Should bleed-

ing to a disturbing extent set in, another and tighter band aroud the root of the penis will remedy the defect, or the bleeding vessels may be ligated.

16. Pass a needle armed with six inches of 0 or 00 catgut through the mucosa, at the center of the dorsum of the penis. A straight Gentile's modification of the Hagedorn needle will be found admirable for quick work. The needle should transfix the mucosa at one-eighth inch from its cut margin. Take up the skin in the same manner and tie the skin and mucosa into neat, tight, but not wrinkled opposition, with a double surgical knot. Take care that the cut edges of skin and mucosa embrace no cellular tissue. Grasp the free ends of the catgut in the jaws of an artery forceps and lay it on the abdomen, which has been covered with a sterilized towel. This will serve to readily distinguish it from the other sutures at the close of the operation.

17. Apply similar sutures, each six inches long, to bring skin and mucous membrane together around the entire cut edges, until within one-fourth inch of each side of the frenum. Always take care that no connective tissue is allowed to project between the lips of the wound, which would then not have the advantage of primary union. Wherever a bit of this tissue cannot be forced back to remain, another suturing of skin to mucosa over it will accomplish the desired end. After knotting each suture at the wound lips, tie its free ends together, in a slip knot so that each pair of sutures can be easily found together at the conclusion of the operation.

18. Raise the prepuce where it hangs from the frenum and replace the skin and mucosa in their original relative positions. While an assistant so stretches the foreskin, pierce its base along the frenum with a needle armed with six inches of catgut twice the thickness of that used before.

19. Give the ends of the suture to the assistant who stretches it at a tangent to the axis of the penis. Take the prepuce in the left fingers, raising the penis. Then, avoiding the suture held by the assistant, cut off the foreskin neatly along the line of the frenum. Tie the ligature to bring the skin in coaptation with the exposed part of the cut frenum. Grasp the ends of the suture with an artery clamp and place it upon the scrotum, which has been covered with a sterilized towel.

20. Examine the entire line of sutures, to be sure that neat coaptation is everywhere obtained. Whenever connective tissue projects between the lips, it must be returned, and if it will not remain beneath the lips, an additional suture placed over it.

21. Slowly relax the rubber band that constricts the root of the penis. In a few moments there may be some oozing from the lips of the wound. If more than mere oozing results, additional sutures will control the bleeding.

22. Fold a strip of 10 per cent. iodoform gauze or 3 per cent. nosophen gauze, eight inches long by one and one-half inches wide in four smooth, equal, longitudinal folds. Have it stretched by the assistant at right angles over the first suture, whose ends are held by the artery clamp lying on the abdomen.

23. Release the suture from the clamp, separate its ends and pass them around the gauze. Tie the gauze firmly against the first knot, by which the skin and mucosa was brought together. Repeat this procedure at each suture, whose corresponding ends, though now all are matted together with blood, can be easily found, because they were tied

together with a slip knot. The gauze must everywhere be laid smoothly upon the wound lips; its tension must be even.

24. When both ends of the gauze are hanging from the last suture at either side of the frenum, release the suture from the clamp lying on the scrotum and give its ends to the assistant, who stretches them apart while placing the penis on the pubis.

25. Take the gauze strip pendent from the left side and lay it smoothly to the left side of the penis, upon the knot of the suture being stetched by the assitant. Then place the end of the gauze pendent from the right side and cross it to the left. Firmly tie the two ends of gauze within the last suture.

26. Cut off the projecting ends of the gauze and trim the catgut beyond their knots, leaving a smooth, neat collar of gauze, about a quarter of an inch behind the corona, firm enough to press any ununited parts of the wound into coaptation, but not tight enough to exert the least pressure upon the penis, or give pain during erection.

A little blood will ooze into the collar. This will swell slightly and in so doing press any little gapings of the wound lips together.

A light gauze bandage will steady the ring in walking. It should be so applied as to leave the whole glans free, that none of the dressing be soiled by urination. As the glans, so exposed, would suffer from friction with the clothing, it must be covered thickly with vaseline, over which a wad of absorbent cotton is placed and tied around the penis with a strip of gauze.

After each urination fresh vaseline and cotton are applied by the patient. In two or three days the glans over the mucosa will be sufficiently hardened to render this protection unnecessary. Within eight or ten days, the cotton will drop off, leaving the incision entirely healed.

The High Operation For Varicocele.

By H. A. Royster, A. B., M. D., Raleigh, N. C.

Some ten or twelve years it was the customary belief among surgeons that every varicocele required an operation. Subcutaneous ligation having been discovered, the open incision through the scrotal tissues was almost universally practiced. Later the opinion of the profession underwent further change, the pendulum swinging the other way, and many were ready to assert that the operation should rarely or never be done.

During the Spanish-American War Senn examined hundreds of recruits and found that a large percentage of them had varicoceles which were giving no symptoms and which did not incapacitate them for the duties of a soldier. It is true that a goodly number can be relieved by suspension, cold salt bathing and a little moral suasion, but a small portion of them need surgical attention and will not improve without it.

I was so impressed with a description of the high operation, as given by R. M. Thornburg, in the *Medical Record* for August 29, 1903, that I determined to give it a trial. A case presented itself soon thereafter, and the method being simple and effective I feel constrained to call attention to it. The technique outline by the writer above mentioned, is as follows:

"The finger of the operator is introduced into the external ring and a nick made with the knife directly over the tip of the finger. With this nick as a landmark an incision 3 cm. long is made, parallel to Poupart's ligament.

The deep fascia is cut through with the knife, and then a little blunt dissection brings the cord into view. The sheath of the cord is picked up between mouse-tooth forceps and torn open. The finger of the operator is introduced and the whole cord easily raised from its bed and brought out of the wound; a ligature carrier is then placed beneath it. The vas is recognized by its white appearance and cord-like feel and is separated from the rest of the cord downward to within an inch of the testis. The testis can readily be brought into view by gentle traction on the cord. The vas is separated from the vessels by six or seven cm. in an upward direction also. The vessels are tied with No. 3 cumolized catgut ligatures, the vessels between them (5 to 6 cm.) excised, the stumps inspected for oozing, the ends approximated and the ligatures tied to each other; thus forming a support for the testis. * * * The cord and vas are dropped into the bottom of the wound and the wound closed."

From my own experience in just one instance, I should say that the advantages of this operation as compared with the scrotal incision may thus be summarized:

1. It is less difficult to perform. The firm stuctures in the groin afford a better basis for surgical manipulation than the flabby contractile tissues below.

2. Chances for infection are considerably diminished, the dressing being more easily applied and retained.

3. The testicle is more securely supported—one of the most important conditions in effecting a permanent cure of varicocele.

Foreign Bodies Under the Eye Lids. Foreign Bodies in The Cornea.

By W H. Wakefield, M. D., Charlotte, N. C.

Every practitioner is liable to be called on, at any time, to remove a foreign body from the eye. This foreign body may be a cinder, a pebble, a grain of wheat, a wheat beard, or one of many other things that may have found lodgement under the yelids. These bodies generally find lodgement under the upper eyelid; hence, in searching for a foreign body in the eye, the doctor should *always* turn the upper lid. I will cite two cases to illustrate the necessity of this little procedure:

One sweltering July day a man of about 24 years old came from a neighboring village to my office to consult me regarding his right eye, the upper lid of which was much swollen and edematous. The lower lid was also involved to a slight extent. The pain was intense and lachrymation profuse. He stated that two days previous while engaged in threshing wheat, he was hit in the eye by a wheat beard, causing intense pain. His family physician removed a small piece of wheat beard which had stuck in the cornea, gave him a lotion for use in the eye and advised him if he was not well in two days to run over to Charlotte and see me. As the eye was considerably worse at the end of two days he had called for relief. Suspecting from general appearances that some foreign body was under the upper lid, I at once proceeded to evert it, but was stopped by the patient on the plea that he could not bear the pain. He was told that although the process would be painful in his case, he must submit or seek some other adviser. On everting the lid a piece of wheat beard at least 1¼ inches long was found tucked under the lid and tearing the mucous membranes and cornea

with each movement of the eyeball. Its removal brought instant relief, and under a simple lotion the eye was well within a few days. A few days later another young man presented for treatment, with the right eye and lids in worse condition than the case just described. Inspection disclosed an enormously swollen upper eyelid, with a peculiar bulging at its center, also a chemotic condition of the eye. The lid was everted with difficulty, and a grain of wheat dropped out. This was enclosed in the chaff and had sprouted. His history was as follows: While binding wheat in June—about six weeks previous—the heel of the cradle in front of him had hit a stone and he instantly felt a blow in his right eye, which caused considerable pain. In a day or two he consulted his physician and was given a lotion for use in the eye. As the eye continued to grow worse, the doctor changed the lotion a time or two, and in despair sent him to me.

The lesson in these two cases is: In treating similar cases, evert the upper lid. A prompt resort to this simple procedure in these two cases would have saved the patient considerable pain and would have added to the doctor's reputation.

..Foreign Body in the Cornea.—The patient with a foreign body in the cornea frequently causes considerable annoyance to the physician who is not prepared to handle this class of work properly. I know of no small injury that can cause as much suffering to the patient and interfere to such an extent with his duties as that one now under discussion. It is unnecessary to detail the symptoms presented by a patient suffering from a foreign body in the cornea, as they are always self-evident. Having a patient presenting symptoms of foreign body "in the eye," or imbedded in the cornea, it is the part of wisdom to always evert the lid, and search carefully its under surface for the offending body, since the first step necessary in killing a flea is to "catch your flea; so in removing a foreign body from the cornea—first find your foreign body.



This is often impossible in ordinary daylight or lamplight, owing to the small size of the body and the inability

of the patient to hold the eye open. For the purpose of finding the foreign body, "oblique illumination" is usually necessary. For this purpose a condensing lense having a diameter of from one to two inches is needed. (A lense of the smaller diameter can be purchased for 50 cents, and is of great benefit in examining small excrescenses or patches of diseased skin.)

To properly examine an eye by oblique illumination, the room should be made dark, the patient should be be seated in a chair, the physician should stand behind the patient and bend over the patient who should throw his head back. An assistant should hold a lighted lamp or candle at the patient's side, on a level with the eye and distant about 12 or 15 inches. The doctor should now hold the glass about 2 inches from the eye being examined and focus the light on the cornea, and by a rotary motion of the hand throw the light in succession on all parts of the organ under inspection. In this manner, if a foreign body be present in the cornea, its location is easily made out. Frequently the eye is so irritable that the patient cannot hold it steady for examination, in which event it is best to first bring it under the influence of cocaine. A little point in this connection that will bear remembering is, "always use a fresh solution," at least not over a week old. By dissolving ½ gr. cocaine muriate in 20 drops of water you will have abundant quantity of an efficient solution, and by putting one drop in the eye each minute until four drops have been used, and waiting one or two minutes longer, you can make your examination, and if the body is found you can generally remove it without causing your patient any pain. For the removal of an offending body in the cornea, all that is needed, if it be in the anterior layers, is a small pointed instrument, a large darning needle answering every purpose.

It can easily be disinfected by boiling; after which place the point under one side of the object and lift it out.

Carefully examine its site after removal to satisfy yourself that none of its substance remains. If the object is steel, iron or coal, a small discolored patch will remain, but this will soon clear up.

The after treatment is usually simple. All that is required in a recent case in which the scar is small is a few drops of a lotion every two hours. I am partial to the following:

℞

Zinc Sulph.	grs. ⅓
Sodii Chloride	grs. 2
Acid Boric	grs. 7
Aqua Dest.	℥ i m

Put 4 to 6 drops in the eye every hour or two.

If the foreign body has been in the cornea several days, and if unsuccessful efforts have been made to remove it, resulting in denuding a considerable area of the cornea surface of its epithelium, you will add to the patient's comfort and hasten the healing process by using one of the following:

℞

Hy. Ox. Flav.	gr. ⅛
Adrenalin Sol.	gtts. 3
Lanoline	grs. 20
Glycerine	℥ i m

Put a little in the eye 3 times daily.

Or,

℞

Iodoform	grs. 5
Vaseline	℥ i m

Put a little in the eye after each application of the lotion.

The first named ointment is the better to use in these cases. (It is the remedy par excellence in conjunctivities,

and with the addition of atrophine, in corneal ulcers) by reason of the superior antiseptic qualities of the yellow oxide, but it must be borne in mind that this agent must be thoroughly rubbed down with a drop or two of the lanoline before adding the vaseline, or small lumps of the drug will remain and act as an irritant. It is well to keep in mind that in these operations on the eye and lids, gentleness of touch is appreciated by the patient and that thoroughness in searching for the offending substance is often needed to avoid a humiliating failure.

SELECTED PAPERS.

Hemorrhoids.

(Read before the Tipton County Medical Society, July 6, 1903, by J. B. Witherington, M. D.)

Gentlemen of Tipton County Medical Society:

It is not my purpose to read an exhaustive paper on the whole subject of hemorrhoids, but simply to call attention to some of the more salient features in the management and treatment of this very prevalent disease. Hæmorrhoids or piles are tumors chiefly composed of dilated blood vessels, or blood clots situated beneath the mucous membrane or muco cutaneous tissues of the anus and lower end of the rectum. There may or may not be hæmorrhage. There may or may not be pain or protrusion. Often defecation is difficult. The tumors may be entirely out side of the rectum. They may be inside, or they may be both outside and inside.

Etiology: Its causes are both predisposing and exciting. The disease is most frequent in middle life, next in old age, and least of all in children. It is more frequent in males than females. This may be more apparent than real, however, as women are possibly not so ready to apply to the doctor for rectal diseases as men. Occupation has a strong predisposing influence in the causation of piles. Severe muscular strain, heavy lifting, constant standing or sitting erect, or leaning forward, crowding in this way the abdominal viscera, indulgence in stimulants, excessive eating, and sedentary habits, etc. Overburden the circulation of the liver, and this brings on congestion of the hemorrhoidal veins, which in turn produces piles. Heredity is said also to be a cause predisposing to hemorrhoids, but it is perhaps more a heredity of habits or of occupation. Among the exciting causes, I will mention constipation, drastic purgatives , improper diet, strain, complications of other rectal diseases, disease of the liver, heart, or kidneys, genito-urinary or uterine disorders—in short, anything that determines an abnormal amount of blood to the pelvic organs or obstructs its return thererfom.

The piles situate above the margin of the anus, and out of sight are called internal, and those below and in full view are called external. Internal hemorrhoids are developed from the superior hemorrhoidal veins, and external hemorrhoids come from the inferior veins. The middle hemorrhoidal veins do not develop piles. In severe, prolonged cases, we have sometimes a mixed variety, which is both inside and outside; but for practical purposes they may be considered and treated as internal. There are various classifications external hemorrhoids, but I shall only

attempt to describe two varieties. First, thrombotic external hemorrhoids; second, inflammatory external hemorrhoids. Thromotic external are small oval or round tumors, situated beneath the skin or muco-cutaneous surface. There may be one or more. They come on suddenly, with a sharp, cutting pain, gradually increasing the size. They are produced by clotting of blood in a varicose vein or rupture of a vessel. There is an aching and throbbing in the tumor, and defecation is accompanied with more or less pain. The tumors sometimes disappear spontaneously. They may become encysted, or, having become infected, may result in abscess or fistula. There is but one scientific course to pursue in uncomplicated thrombotic external hemorrhoids, and and that is enucleation of the clots, having cleansed the parts thoroughly and ejected into the skin and mucous membrane covering the tumor a four per cent. solution cocaine; an incision should be made in the line of the radial fold, well down into the tumor, and the clot turned out, and the cavity packed with iodoform gauze. After twenty-four hours, remove the gauze and allow the parts to heal, which will usually be accomplished in two or three days. This can generally be done when we first see the patient by explaining that there is a small clot that needs to be let out, and that under cocaine it will not give any pain.

The inflammatory external variety is an inflamed and swoolen condition of the anal folds. They are pear- shaped, their small end toward and sometime within the sphincter, and have a muco-cutaneous covering. They result from irritation, anal ulcers, fissures, injuries, etc.

Symptoms: At first there is a sense of heat and uneasiness, and oval tumor is felt, which may pass away, but may become aggravated. The parts now ache and burn, there is spasm of the sphincter. Lying on the sides with the hips elevated is the most comfortable position which can be assumed. There is constipation; there may be constitutional symptoms. The tumors are always very painful and tender to the touch and the suffering is at times very great. The treatment consits of either radical removeal or subduing the inflammation by antiphlogistic methods. Lying with the hips elevated and an ice bag applied to the parts will often relieve them very very quickly. When there is much swelling, gauze soaked in boro-glyceride, or a solution of ichthyol, and applied to the parts, and a hot water bag applied over this, will usually reduce the swelling and relieve the pain. The following will be found very beneficial in these cases:

R

Morphine Sulphate	grs. x
Ichthol	oz. 1-12
Ung. Belladonae	
Ung. Stramonia	aa oz. 1

M et. Apply three or four times daily.

The operation is done under general anesthesia and stretching the sphincter until it is thoroughly relaxed. The tumors to be removed should be removed with scissors, allowing the parts to heal by granulation.

Of internal hemorrhoids, there are several varieties, but as the scope of this paper will not permit a detailed de-description, I describe the variety most prevalent, namely, varicose internal hemorrhoid. It is a varicosity of the internal hemorrhoidal veins and hypertrophy of connective tissue in which these vessels lie. They originate in the little venous pools which connect the artrial with the venous circulation. They are at first simply conjestions of

the vessels. Straining at stool, friction of fecal passages, pressure of the blood column, etc. produce diatation of the veins, hyperæmia and hypertrophy, until veritable blood tumors are formed.

Diagnosis: The patient gives a history of suffering from a feeling of fullness in the region of the hemorrhoidal vessels. This is frequently accompanied with hemorrhage more or less profuse, which gives temporary relief to such sensations. If the condition has existed for a prolonged time there is a protrusion of mucous membrane containing these distended hemorrhoidal veins at each evacuation of the bowels; these masses may become replaced spontaneously or may have to be returned mechanically. Upon examination, soft oval masses will be felt, varying in number from one to five or six or more, although there are usually not more than three or four. Some are usually larger than others; they may acquire a considerable size, sometimes rather more than inch in diameter. After hemorrhoids have existed for a time, the patient usually complains of a constant burning sensation in this region. The treatment may be classified as preventive, palliative, and curative. The presence of predisposing causes may be frequently recognized by family physician before piles actually occur. The influence of heredity is doubtful, but we inherit environment, avocation, and habits, and they cause hemorrhoids. It is not only the duty of the doctor to teach his patron how to avoid disease and maintain and develop sound bodies, but the writer believes that the public school curriculum should have as one as of its features, not the least important, a regular and systematic course of lectures on higiene by a competent medical man. Constipation in children should always be looked after and the cause removed. Dilatation of the sphincter gives splendid results, soap bougie, cold enemata, or glycerine suppositories. Persons of a hemorrhoidal tendency should avoid indiscretions in diet, such as would cause constipation or congestion of the liver. Wines, liquors and the use of tobacco should be discountenanced. The bowels should be regulated with such remedies as cascara and phosphate of soda, avoiding drastic purgatives. The cardinal principles in the palliative treatment of hemorrhoids consists in the prevention of prolapse and arrrest of hemorrhage. Rest in bed, cold applications, astringent injections, such as hydrastis, tannic acid, and adrenalin will usually accomplish this To prevent its recurrence obstruction to the portal circulation should be removed, whether it is in the line of vessels or in the liver itself. Less food and more exercise is usually good advice. In these cases alcohols, tea, coffee, and tobacco, should be avoided, or taken in very limited amounts. The regulation of the bowels is of great importance; they should be kept lax and loose for this purpose. I am partial to this receipe:

R

Fl. Ext. Arom. Cascara Sagrada			
Fl. Ext. Hydrastis	aa	℥	ı
Tr. Nux Vomicae		℥	ı
Glycerine		℥	ı

M et. Direct from one-half to one teaspoonful three times daily.

Or phosphate soda may be given in dram doses before breakfast every morning. Cold water enemeta are very often beneficial. A regular free evacuation should be secured each day, and apply some soothing ointment or suppositories, together with the use of the sitz bath or shower bath, will result in relief of this condition. It is not conservative surgery, however, to use palliative remedies instead of a radical operation

in this affection, but there are so many people suffering from piles that cannot and that will not submit to the radical operation, and who go off after patent medicines and quacks and irregulars that advertise to cure without the use of the knife, etc., that I think regular doctors would be justified in paying more attention to palliative measures, as unquestionably a great many of these cases are greatly benefited by the treatment. In order to secure a permanent cure in many cases, however, an operation will have to be employed.

Preparatory treatment: The patient should be cautioned to eat only easily digestable food in very moderate quantity, to take a mild saline laxative every day for several days previous to undergoing the operation, and on the day before the operation he should be given one or two ounces of castor oil, followed the following morning with flushing of colon. In this manner the alimentary canal will be quite thoroughly freed from material which might otherwise irritate the wound surfaces after the operation.

Operation: In my own experience the following operation has proved exceedingly satisfactory in nearly every instance: The patient being anesthetized and placed in the lithotomy position, the sphincter muscles are very thoroughly dilated by introducing the thumbs beyond the internal sphincter and dilating slowly but thoroughly. The slow progress of the stretching will prevent the tearing of the mucous membrane unnecessarily. The stretching should be continued until the sphincter remains lax after the stretching has ceased. Each hemorrhoid is then caught with a pair of hemostatic forceps. If the tumor is attached by a small base a ligature is thrown around the whole tumor and tied tightly, but if the tumor has a broad base it is then transfixed with a needle armed with a double silk ligature. The needle is then cut away and the ligature tied upward beneath the forceps. With scissors or scalpel the mucous membrane is then carefully cut transversely at the margin of the anus and the second ligature is tied in the groove which has thus been formed. The projecting portion of the hemorrhoid is then cut away, only a sufficient amount being left in place to prevent slipping of the ligature. This method is applied to each hemorrhoid in succession until all have been removed.

The clamp and cautery is said to yield equally good results; in fact, it is preferred by some very eminent authors. I will not attempt to describe this method of operation, as I have never resorted to it.

I have been in the habit of introducing some iodoform gauze into the rectum as a tampon or for drainage, but I am convinced that my cases would get along equally as well without anything, except an ordinary pad to the external parts, held in place by a T bandage for the purpose of absorbing any secretion which may occur. The patient is then given a hypodermatic or morphine sulphate, $\frac{1}{4}$ grain, and atropine sulphate, 1-150 of a grain, which may have to be repeated in some cases several times for the first two or three days. The patient is kept on a liquid diet for four or five days. At the end of this time a cathartic is given, and before this causes an evacuation a soap and water enema is given. This is repeated after the cathartic has acted. From this time on a saline laxative is given to keep the bowels acting once daily, if needed. The patient is confined to his beg about one week. If you experience difficulty in getting the bowels to move, it wil be well to examine the rectum with the finger. Five

or six days after I had operated on a man, some two years ago, one dark, rainy night, I was summoned to go through mud and slush a distance of ten miles to see him. They said he had not had an action from his bowels, and that they could not be moved. When I arrived I found all the people in a high state of excitement and anxiety. On examination of the rectum with the finger I found a very large, hard mass of fecal matter completely filling up the rectum. I broke it up and delivered it picemeal, and when the delivery was completed anxiety gave place to hilarious rejoicing. There was more joy in that household that night than if a boy baby had been born therein.

I relate this that you may remember that fecal impaction may occur.—*Nashville Journal Medical and Surgical.*

The Treatment of Lacrymal Stricture. *

New Method—New Results. Illustration of New Instruments. By J. Wilkinson Jervey, M. D., Greenville S. C.

(From Medical Record.)

The common occurrence of lacrymal stricture and its attendant inconvenience, and even danger to the ocular integrity, combined with its frequent intractability to treatment, often make this affection a source of great anxiety to the patient as well as to the ophthalmologist. The accepted method of treatment for the last few years has been to split the lower canaliculus almost or quite down to the sac, and then to pass through the split canaliculus, sac, and nasal duct, at intervals of about forty-eight hours, a series of solid probes. These probes, only one passed at one sitting, range in diameter from $\frac{1}{4}$ to 4 mm. An effort is made at each sitting to pass a larger size than that used at the previous visit. Antiseptic syringing and collyria are generally used.

Authorities differ as to the limit of size to which the duct can wisely and safely be probed, and the force to be applied in the attempted passage. Theobald (Norris and Oliver's System of Diseases of the Eye) uses for his largest dilatation a No. 16 probe, 4 mm. in diameter. He says that in using the large sizes of this instrument he occasionally finds it necessary to utilize the strength of both hands in order to effect a passage. The professor has made his reputation, and is doubtless privileged to exercise certain liberties; but, pray let me counsel those among us who still may aptly style ourselves the Great Unknown, to take no such chances with their reputations or their patients. If you have never attempted this heroic measure, heed me when I cry out, "Don't!" If, on the other hand, in the exuberant enthusiasm of youth you have already transgressed, as I have, my counsel is superfluous, I'm sure.

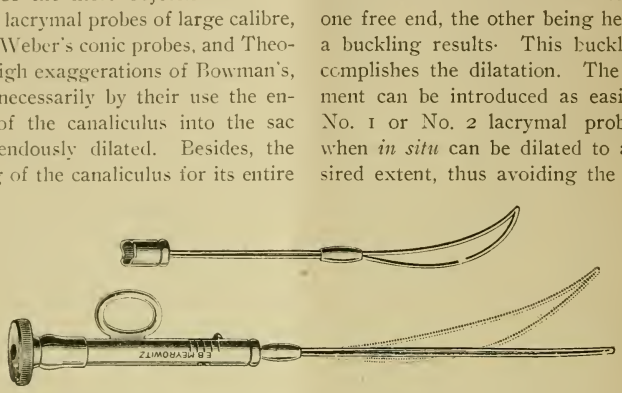
My experience has taught me that if the luxury of the apparently triumphant moment of a false passage has been indulged in, the patient may be dismissed at once as incurable. The chances of a cure thereafter are infinitesimal. Thenceforth the length of palliative treatment is to be limited only by the length of the patient's purse and patience.

Some surgeons believe certain strictures to be amenable to cutting, and for this purpose is used a delicate, long-shanked knife. The use of this instrument is preceded by the passage of small probes, and is followed by that of larger ones. When it is necessary to split the canaliculus, the incision should

*Read before the Tri-State Medical Society of Georgia, Alabama, and Tenessee, at the meeting in Atlanta, Ga., October 13-15, 1903.

lie well to the inner side of the lid, otherwise a bad cosmetic effect is produced, and, even worse, bad drainage, or none at all, will result.

One of the most objectionable features of lacrymal probes of large calibre, such as Weber's conic probes, and Theobald's high exaggerations of Bowman's, is that necessarily by their use the entrance of the canaliculus into the sac is tremendously dilated. Besides, the splitting of the canaliculus for its entire length is necessary as a preliminary. These conditions are undersirable for two important reasons, first, that capillary suction and drainage are apt to be interfered with; and second, that the large orifice permits easy entrance of foreign matter into the sac. The little instrument here illustrated is designed to remove, at least partially, these objections, and in addition it seems to possess original advantages.



I shall not recite histories; too often their effect is soporific. Let me say, however, that in my own practice this dilator works like a charm. I may seem enthusiastic; doubtless I am. But when, in case after case, an ophthalmologist is enabled to cure, so far as he can see, in anywhere from two to ten sittings, a distressing affection which he has had dragging along unsatisfactorily for months and even years, some extenuating circumstances must be granted. True, I have had barely five months' observation of the treatment, but thus far it has been all that could be desired and more than might have been expected.

The principle of the instrument is simply that of a wire bent double upon itself. When traction is exerted upon one free end, the other being held firm, a buckling results. This buckling accomplishes the dilatation. The instrument can be introduced as easily as a No. 1 or No. 2 lacrymal probe, and when *in situ* can be dilated to any desired extent, thus avoiding the trauma and irritation necessarily involved in forcing a large solid dilator into the passage. The greatest pressure of dilatation occurs at the point of the greatest resistance in the canal, which, of course, is the location of the stricture. While the instrument is in place and the wires are separated the passage is open for syringing, or even for applications by means of a cotton-tipped probe. This is possible with no other form of dilator hitherto devised. By this means, with every fold and crevice of the mucous lining on the stretch, the entire surface is accessible to flushing and medication.

With this instrument it is often feasible to dilate lacrymal strictures to any desired extent without splitting the canaliculus. In this way the surgeon can avoid many of those unfortunate cases in which even after the stricture has been relieved by the old method, epiphora persists on account of the lost power of capillary attraction and suction due to splitting of the canaliculus. Were this last the only advantage the

dilator possessed it would still be of inestimable value to the ophthalmologist.

The instrument is provided with a sliding collar which can be pushed down to the punctum lacrymale in those cases in which splitting is unnecessary, so preventing the possibility of rupturing the punctum or canaliculus in the process of dilating the remainder of the canal. The wire part of the dilator is slightly malleable and can be bent to any desired curve. The instrument is manufactured by E. B. Meyrowitz, New York. I wish, here, to thank Dr. W. M. Norwood, a dental surgeon of my city, for most important suggestions and material aid in the preparation of the original model.

In using the dilator, I practice the following technique: After instilling adrenalin and cocaine into the eye, the attempt is made to pass through the lower canaliculus at No. 1 or No. 2 Bowman's silver probe. If this cannot be done after repeated trials, the punctum is incised for about 2 mm., and another effort is made to pass the small probe. If this be still impossible, then the canaliculus must be split in the usual way. With a small syringe and silver cannula adrenalin, cocaine, and boric acid, in separate or mixed solution, are injected into the sac and as far down the canal as possible. This has the valuable triple effect of antiseptic flushing, production of anæsthesia, and often enlargement of the lumen of the passage by lessening the mucous vascular engorgement.

After a wait of five minutes for these agents to take effect, the dilator, with a little simple aseptic or antiseptic lubrication, such as carbolated or borated vaselin, is passed through the canal, the way having first been gently explored by the small Bowman probe. The dilator being held by ring and barrel with the left hand, the right hand turns the thumbscrew to spring the wires apart. The amount of dilatation can easily be gauged while the instrument is in position by means of a small scale on the barrel.

The dilatation should be effected slowly, and a little at a time, with waiting intervals between the turns; when it is done slowly and gently, little pain is caused. Having been sprung to the desired extent, the amount of spreading being increased a little at each successive sitting, these being about forty-eight hours apart, the instrument should be allowed to remain in the passage for ten or fifteen minutes, stretching it open. Then the thumb-screw is rapidly reversed, the instrument is withdrawn, and the pasage is syringed with some suitable antiseptic solution. In the intervals between sittings, the patient is given the usual antiseptic wash for the eye.

The Importance of Minor Surgery Being Done Right.

By D. A. Stanton, M. D , High Point, N. C.

The term "minor surgery" is implied to mean the little surgery, or the repair of slight injuries, or performing those little operations coming up in the general practitioner's work. Because it is called minor surgery, but little importance is attached to it, and the inference is that any doctor can do this class of work as well as one who lays claim to surgery in all its departments. This is a serious mistake. Some surgery that would be classed minor is of more importance to the patient than some that is classed major surgery; *e. g.*, take a mangled hand and fingers, where the flesh and tendons are badly torn but the bone is not specially damaged. We can all appreciate the worth of a finger to

any one, but especially its value to a man who earns his support by the exercise of his mechanical training. With such a case before some physicians, one, two, or possibly three fingers would be amputated and the patient maimed for life, and his ability to earn a livelihood be much impaired.

To save these fingers, "and it is easy to do," is good and scientific surgery, though it will tax the patient and ingenuity of the doctor.

It is very rare that a finger need be amputated because the flesh and tendons are torn.

Compare the management of a case thus referred to, to that of an arm or leg that has been crushed beyond the possibility of natural repair, and has to be amputated. In the latter case there is but one thing to do, viz., amputate; and while the amputation of an arm or leg would be classed major surgery, it is far less a test of a surgeon's skill and ability to do scientific work, than the management of many injuries that are classed as minor.

Again, take the operation of circumcision. That is classed as minor work, and not one-half the operations done are any improvement over the condition for which the operation was done. I have seen many cases where the last state of the patient was worse than the first, and all because it was considered minor surgery and undertaken by men who attach no importance to what they are doing because it is little surgery.

I have been consulted by a number of young men and boys for the relief of redundant tissue around and under the glans, who had had a so-called circumcision done. I would find that the operator had simply split the skin back to the glans and called it circumcision. Any one ought to be able to see the folly of such work and, unless prepared both with knowledge and instruments, let it alone. Yet this is only one of hundreds where the patient is not only not benefited, but made worse by a novice doing minor surgery.—*Medical Council.*

ABSTRACTS.

Dislocation of the Outter End of the Clavical.

John G. Sheldon states in *Annals of Surgery* that disclocations of the outer end of the clavicle may be divided into two classes: 1, Cases in which the coracoclavicular ligaments are completely torn; and, 2, cases in which a complete rupture of the coracoclavicular ligaments has not occurred.

By physical examination we can distinguish these two classes clinically.

Dislocations of the outer end of the clavicle, without complete rupture of the coracoclavicular ligaments, can be treated successfully without operative intervention.

Dislocations of the outer, with complete rupture of the coracoclavicular ligaments, require operative procedure to secure satisfactory results.

From observation on cadavers, and from examining the cases reported in this article, he believes that in all cases where the articular surfaces of the clavicle and acromion can be separated one inch, the coracoclavicular ligaments are completely ruptured.

The most approved metheod is exposure of the joint by incision; drilling the clavicle and acromion; passing and tieing two absorbable sutures; approximating ligaments and fascia with fine

catgut; suturing the skin wound with silkworm gut. Drainage is not necessary. In operating old cases it may be necsssary to free the clavicle from cicatrical tissue before complete reduction of the dislocation can be accomplished.

Subjectorial Absess.

Russell S. Fowler states in *Brooklyn Medical Journal,* that supectoral abscess is a suppurative inflammation occurring in the connecteive tissue underlying the pectoralis major muscle. More rarely the abscess may underlie the pectoralis mnior. In its phlegmonous form like subscapular abscess, in the early stages, it presents some difficulty in diagnosis. It occurs as a primary or secondary affection. When primary, the exciting cause may be a blow, resulting in a locus minoris resistentiæ to which infection entering anywhere in the course of these lymphatic vessels through a wound in the neck or chest. Secondarily, it may result from abscesses within the chest which perforate the chest wall beneath the pectoralis major muscle, or it may follow necrosis of the underlying ribs, inwhich case it is usually tubercular.

Primary subpectoral abscess is rare and the early diagnosis difficult. Pain is complained of over the pectoralis major muscle which is intensified by movements of the arm. An inspection reveals a more or less diffused swelling under the arm but if seen early no appreciable swelling may be present and the diagnosis will then rest upon pain, point tenderness, the rigidity of the shoulder, and a rise of temperature. The skin overlying the muscle is unchanged unless the infection be unusaully virulent, and the body of the muscle becomes involved when the infection will involve the skin and the abscess evacuate spontaneously. In the majority of cases the pus tends to progress in the direction of the axilla, those beneath the pectoralis minor pointing in the axilla, those beneath the major pointing in front of the axilla, just behind the border of the pectoralis major muscle.

In regard to treatment in the diffuse form open either in the axilla or through the skin and muscle overlying the abscess. In the circumscribed cases make the incision directly over the abscess. Avoid injury to the large thoracic vessels by making the incision parallel to and a short distance from the border of the pectoralis major muscle. Early evacuation is the only treatment permissible.

The Treatment of Convergent Stra= Bismus.

Wm. G. Craig, M. D., in New York Medical Journal.

Not only the laity but a great many physicians are under the erroneous impression that, if crossed eyes are straightened by an operation, the patient, is cured, and the result all that is to be desired. Squinting eyes are considered with indifference. There is a vain belief that the deformity will be outgrown, that nothing can be done until the child is old enough to read, or at least to know the alphabet, and that when he has reached the age of 8 or 10 years, then by a simple operation the crossed eyes may be made straight. It is this want of knowledge on the part of parents, and lack of advice on the part of the family physician, that handicaps us in treatment.

A child is born with the ability to perceive light only. The image of surrounding objects is pictured upon the retina, but as such is not perceived. The brain centres must be educated to interpret the nerve impulses; this edu-

cation takes place gradually. If the images fall upon corresponding portions of the retina in each eye with sufficient distinctness, the brain perceives them as one, or fuses them, and we have singular binocular vision. This power of fusion is acquired by the fifth or sixth year. If from any cause the vision of one eye is poor, the incentive to fuse the images is wanting, the better eye alone fixes, and the weaker eye, if there is muscular inequilibrium, turns in or out and takes no part in the visual act. During these five or six years the eyes are being educated, but educated wrongly. The deformity which at first was slight or transitory, becomes fully developed and permanent.

In seventy-five per cent. of all cases of convergent strabismus there is an error of refraction, the eyes are either farsighted, astigmatic, or both. The vision of the two eyes is unequal in the majority of cases. The vision of the fixing eye may be normal, but the vision of the squinting eye is defective. The defect may be slight, or so great that the eye has but the ability to perceive light. We have, then, to deal, not only with a muscular deformity, but with an eye whose vision is impaired and whose function is undeveloped or lost.

The ideal cure of cases of strabismus would be the restoration of vision and function of the eyes and the correction of the deformity.

Can this be accomplished Upon the answer to this question will depend the treatment to be employed. If the function of the eye can be restored, or partially so, and the vision improved, even to a limited extnent, effort should be made to accomplish this. This is possible, even after the eye has been neglected for many years. Johnson reports two cases. In the first case there had been a convergent squint since childhood, the patient being thirty-five years of age. The vision of the fixing or non-squinting eye was normal; vision of the squinting eye, counting of fingers at two feet. The fixing eye was lost by accident and in ten days the vision of the remaining eye had improved to normal. In the second case, a man aged thirty years, the vision of the squinting eye 20-70; in three months after the loss of the fixing eye through disease, the vision had improved to 20-15. Lewis reports the case of a child, aged eight years, with right eye amblyopic; vision, ability to count fingers at fifteen feet. After three months use of this eye, the left being covered certain periods each day, the vision had improved to 20-30. Similar cases of improvement have been noted by Landolt, Javal, Pannas and Worth.

Efforts in the direction of improving the eye should begin early and be kept up systematically and continuously. The earlier they are begun, the better the chance for improvement.

* * * *

After elaborating a plan of treatment of interest only to the specialist, he concludes by calling atention to the following points.

First. The earlier the child is seen, the better the prospects for a cure.

Second. The vision of squinting eyes can in a majority of cases be improved and some function restored if treatment is begun early.

Third. A small percentage of cases of convergent squint can be cured by mydriatics, glasses, and proper exercises, alone without operation.

Fourth the correction by non-operative methods is much to be preferred, as the motility of the eye is more perfect and the deformity produced by sinkingof the caruncle is avoided.

Fifth. Operative procedures should should be employed in those cases in which non-operative treatment, after a thorough trial, has failed, and in those cases in adults in which we operate for the cosmetic effect.

[I have notes of a score of cases in which marked convergent strabismus has been cured by glasses and muscular exercise. Ed.]

Surgical Treatment of Gall Stones.

Curtis in New York and Philadelphia Medical Journal.

We have conditions which may be treated expectantly, but well marked lesions require surgical aid. Surgeons are agreed as to essentials, but not unanimous as to details, and the object of this paper is to formulate ideas as to when an operation is necessary, advisable, or can be dispensed with.

Pathologically, gall stones are formed by deposits of biliary constituents, around a foreign body, usually a clump of mucus, produced by slight catarrhal inflammation of the gall bladder. This inflammation is due to infection which reaches the gall bladder by ascending the ducts from the duodenum, by penetrating the walls of the bladder from some neighboring focus (suppuration of the kidney, or abscess around the veriform appendix, for instance); or, finally, by way of the blood vessels. The last mode of infection is supposed by Chiari and Councilman to be the most frequent. It is analougous to the cases of osteomylitis of a bone of the extremities secondary to an abscess of the tonsil.

Stones rarely form in the gall ducts, those which are found there having originated in the bladder. Obstruction to the free outflow of the bile hastens the growth of the calculi. When a stone becomes lodged in the neck of the bladder or in the cystic duct, it blocks the outflow of the vesical contents, and the intravesical pressure is increased by secretion of mucus and by inflammatory exudate. There are three modes of termination in such a case:

(a) The stone remains in place, blocking the passage, resulting in (1) permanent distension of the gall bladder with mucus, serum or pus; (2) perforation or gangrene of the gall bladder; or in (3) subsidence of the attack when the bladder walls become accustomed to the pressure and resume their powers of absorbtion, thus removing a portion of the fluid contents.

(b) The stone becomes dislodged, falling back into the bladder, and all the symptoms are relieved.

(c) The stone passes on into the common duct, with the result that, (1) the stone passes on into the bowel; (3) the stone remains in the common duct, causing chronic biliary obstruction, or not obstructing the duct and causing few or no symptoms (becoming "latent" in the last case); or that (3) perforation of the duct occurs, which result in the escape of the stone into the bowel or elsewhere, by the fistula.

Stones so lodged may become latent but may set up inflammation at any time, by becoming infected or by traumatism altering the position of the stone. Obstruction of the biliary passage and inflammation due to infection are main features of gall stone pathology. They are two classes, according to absence or presence of infection. Infection is at the beginning of the formation of calculi, and is also the principle source of danger arising from them. Infection of a gall bladder containing stones is more likely to suppuration, ulceration and perforation than one without stones, and whether there

be obstruction or none, though obstruction increases the danger.

The presence of gall stones is much more common than is generally supposed, and may be brought about by a mild cholecystitis, which may exist before gall stones are found. All cases complicated with sepsis require surgical treatment.

Complete or nearly complete cases of obstruction are generally referred to the surgeon too late to be benefited, and and good results from operation can be expected only when the patient is in good condition, as the long continued obstruction hastens the progress of the hepatic cirrhosis, and interstitial nephritis commonly present.

Simple cases of biliary colic or cholecystitis may or may not need an operation. Palliative measures may be admissible up to a certain point, but if symptoms persist for two or three days in severe cases or for weeks in mild cases, operative measures are indicated. The risks of delay in serious cases are much more serious than operation.

The acute attack may pass off with or without the passage of the stone, or other or other stones may remain to be followed by other attacks. Successive attacks indicate the desirability of an operation with drainage and disinfection of duct and bladder.

" The advantages of operation performed while the stones still remain in the gall bladder or cystic duct, and before grave infection has developed are numerous.

1. The accidents of infection are avoided and any inflammatory condition which may exist can be improved or cured, just as drainage cures urinary cystitis.

2. The stone is removed before it enters the common duct, thereby preventing all the dangerous consequences likely to follow the presence of a stone in that passage.

3. Further attacks of cystitis and colic are prevented.

4. Further calculus formation is prevented or impeded, for the stones are formed in infected gall bladders and the latter may be removed by operation or rendered so healthy by drainage that no more calculi will form. Kehr (*Muenchener med. Wochenschrift,* 1902, Nos. 41, 42 and 43) estimates the recurrences of stone, adhesions, and other complications after operation in his cases at ten per cent. Schott (*Beitrage zur klin, Chirurgie,* xxxix., 1903, S. 427) gives the final result of 180 cases from Czerny's clinic followed for five or six years after operation, including serious conditions requiring choledochotomy, cholecystenterostomy, and the like, and found only five per cent. had symptoms referable to the biliary system. Not a single case had another gallstone form after operation.

5 It must be remembered also that latent cases are by no means free from danger, so that the individual who has recovered from an attack of colic cannot be considered cured even if he is entirely free from symptoms for years, as it is proable that stones remain behind or that some chronic cholecystitis persists. The possibility of secondary pancreatitis must be kept in mind, and also that of cancer of the gall bladder, which is more common than has been supposed. Riedel states that in his practice he has observed over fifty cases of cancer of the gall bladder, and it is to be noted that while the presence of gall stones is universally accepted as the principal cause of this disease, the stones have generally existed without previous symptoms, the first sign of trouble being given by the tumor of the gall bladder itself.

6. Without reference to more important results, it is the general feeling of those with experience in the surgery of cholelithiasis that in the latent cases, while the patients do not present symptoms pointing directly to the biliary system, they are afflicted with various dyspeptic complaints and that the latter can be relieved or permanently coured by operation."

Surgical Treatment of Cholelithiasis.

Albert Ashlin Berg reports in *Annals of Surgery,* September, sixty-one patients operated on at Mt. Sinai Hospital in the service of Dr. Gerster during the years 1898-1902. He states that the mortality of eighteen, or 29 per cent., was largely due to the delay in seeking surgical interference, until the patients had become exhausted by repeated attacks of colic or septic from cholecystitis or suppuration inflammation of the gall bladder. Thus of the sixty-one patients, nineteen had empyems of the gall bladder, four extensive gangrene, and six obstructive jaundice at the time of their admission. Only twenty were admitted in or could be tided over into a quescent period of the disease. He states that if good results are to follow surgical treatment, the patient must be operated upon early, and gives the indication for the medical and surgical treatment to be as follows:

Medical treatment: Cholecystitis pain or attacks of biliary colic, in either case unattended with fever.

Surgical treatment:

1. Operations of choice, undertaken in the quiescent period; mortality, 2 to 3 per cent.

(*a*) Severe cholecystitic pain or oft-repeated, uncomplicated attacks of biliary colic, persisting in spite of medical treatment.

(b) After the first attack of acute cholecystitis attended with fever, pain, distension of the gall bladder.

2. Compulsory operations, undertaken at any time of the day or night, often amidst unfavorable surroundings; high mortality.

(*a*) Foudroyant or intensely acute attacks of cholecystitis.

(*b*) Hydrops, empyema, gangrene, or perforation of the gall bladder, cholæmia, abscess of the liver, diffuse peritonitis.

As to the late results after gall stone operations, a number complained of dragging, dull pain in the right hypochoendriac region, due to adhesious around the contracted gall bladder. Three cases of post-operative hernia through the scar followed. Six of the patients had to be re-operated to remove culculi in the cystic or common ducts that had not been removed at the first operation. One had recurrent empyema of the gall bladder, with rupture, several months after the operation. He gives in full the technique for operations upon the gall bladder and ducts.

An experimenta research into the temperature relationship existing in shock.

G. C. Kinnerman (*Annals of Surgery*) being impressed with the fact that persons injured in railway accidents, when allowed, either from negligence or non-discovery to lie upon the ground for any length of time, that the shock in every instance was much more severe than if the patient were immediately put upon a board or cot and well covered with blankets, was led to conduct a number of experiments upon upon dogs in the Physiological Laboratory of the University of Chicago.

Series A. The dog was anæsthtized, abdomen opened and intestines exposed

and spread out upon abdomen. No manipulation.

Series B. The intestines was spread out upon abdomen and the dog was immediately picked up and placed in a bath tub containing normal saline solution at as near normal temperature as was possible to keep it. The intestines were spread out upon the abdomen and vigorously manipulated until the production of presumably fatal shock, then the dog was placed in the bath and the effect noticed. In A the average fall of temperature was 5.7 degrees C. In B, 1 degree C; in C, 5.77 degrees degrees C, with a rise of 3.8 degrees C, after being placed in the bath.

From the experiments he draws the following conclusions:

Shock must not be considered as due to the lowering or exhaustion of one bodily function, but as a composite condition embracing an interference with the normal height of the blood pressure (lowering), an interference (lowering) with the respiratory act, and a marked fall in the body temperature. Of these as shock increases in severity, the most uniform and progressive factor is the fall in temperature. That there is a relationship existing between the body temperature and shock is evident by considering:

1. That in one series the fall in temperature was the sole cause of shock.

2. That where, by continuous bath, the temperature fell but one degree Centigrade (average), the respirations were increased instead of diminished, and the blood pressure was greatly lessened.

3. That by raising the body temperature previously lowered in shock, the respiratory rate was increased and the blood pressure raised. This relationship may be thus expressed:

(a) A sufficient fall in the body temperature *can* cause a decrease in the respiratory rate and a marked fall in the blood pressure, which, together with itself, we designate as shock.

(b) Conversely, a limiting of the fall limits the fall in pressure and prevents a fall in the respiratory rate. Therefore shock is limited or prevented.

(c) Antagonistically, rise of the temperature causes a rise of the blood pressure and the respiratory rate (reduced in shock), with the result of a gradual amelioration of all symptoms.

Thus, of the three factors concerned, the temperature commands first place by its power of production, by its power of limitation, and by its power of amelioration of the composite condition—shock.

Local Anesthesia.

F. F. Connell states, in *Annals of Surgery*, that local anæsthesia is usually accomplished by means of freezing with ethyl chloride, or by the injection of cocaine or one of its analogous preparations.

Frigorific anæsthesia will be found to be most unsatisfactory. In a case where dissection is necessary, the changes in the tissue, caused by the freezing, make the structures very difficult. Where a single incision alone is necessary, pain caused by the freezing and thawing of the tissues is greater than incising unæsthetized skin. The chief agents used for local anæsthesia, by injection, are cocaine, Eucaine A, Eucaine B, Tropocaine, Nirvanin, Orthoform, Anæsthesia, Holocain. The chief reason for such a large number of substitutes for cocaine, is its toxicity and inability to steralize. The toxicity can be overcome by using weak solutions, or one of the substitutes, preferably Eucaine B, constricting the part, and by the addition of adrenadin chloride. Cushing states that the Schleich solution can be steril-

ized, and Riley states that dried cocaine can be heated to a temperature of 320 degrees for an hour without impairing its efficiency. Eucaine B has for its most characteristic and advantageous features the following:

(a) Non-toxicity, the fatal dose being so large, between 6 to 7.5 grains per 2.5 pounds of body weight, that there is practically no liability of such a lethal dose being injected in the course of an ordinary local anæsthesia.

(b) It may be sterilized by heat without the loss of any of its anæthetizing properties.

(c) It will not deteriorate or decompose with keeping; (d) and, it is claimed will not increase the tendency to hæmorrhage to any marked degree; that vasomotor paralysis and secondary hæmorrhage will occur less frequently than after the use of cocaine.

These points have been the most influential in placing Eucaine B as the local anæsthetic of choice, and its use is being rapidly increased.

Local anæsthesia or analgesia may be divided into three sub-divisions

1. Direct anæsthesia or the injection of the anæthetic substance subcutaneously or applying direct to a mucous membrane.

2. Infiltratior anæsthesia, or the ultra dermal instead of the hypordermal injection of the solution and the use of dilute solutions. Schleich solution No. 2, which is generally used has the following formulæ:

Cocaine muriatis	gr. ii.
Morphine muriatis	gr. ½
Sodii chloride	gr.iv.
Aquæ distillatæ	dr. iv.

3. Regional anæsthesia, or the injection of 1 to 3 per cent. solution into the sensing nerve that supplies the field of operation.

As showing the important position that local anæsthesia has assumed, attention may be called to the fact that Mikulicz has classified operations into

1. Operations in which local anæsthesia is positively indicated.

2. Operations in which a general anæsthetic is positively indicated.

3. Border line operations.

Under 1 are placed extirpation of small non-malignant tumors, tracheotomy, gastrotomy, strangulated hernia, etc.

Under 2, extensive operations on the head, majority of laparotomies, removal of large malignant growths, such as carcinoma of the breast.

Under 3, gastro-intestinal operations, goitre resection, herniotomies.

The advantages to be derived from the employment of local anæthesia are many, the first and foremost being:

1. Removal of the danger of death on the table. Others which may be mentioned are:

2. Avoidance of the after affects of general anæthesia on the heart, liver, kidney and lung; but postoperative pneumonia seems to occur about as frequently after one anæsthesia as the other.

3. No period of postoperative nausea, vomiting, or unconsciousness.

4. No danger of patient being drowned in fæcal vomitus.

5. Patient, being conscious, is able to assist the operator in various ways.

6. Reducing by one the number of assitants; although it will be found to be convenient to have an assistant at the head of the patient to encourage and reassure him, and to be ready to administer a whiff or two chloroform, if necessary.

"The question of to-day is *not* which is the safer anæsthetic, chloroform or

ether, but in what cases can local anæsthesia be substituted for anæsthesia by inhalation."

The General Principals on Which Amputations were Performed in Preantiseptic Times.

Thomas H. Manley (*American Journal of Surgery and Gynecology*) states that the greater part of the text occupied with the subject of amputations in the average text-book or encyclopedia of surgery relates chiefly to the manner of making flaps, that in traumatic surgery it is quite superfluous, and in many instances with the unexperienced lead to a serious error. That the time honored saying that "an amputation is an opprobium to surgery," is still doing good service, but if a limb is hopelessly crushed, it does not seem clear what opprobium should attach to the surgeon who preserves a part of the limb and saves the life. The mortality was considerable and amputation was regarded as the last resort of surgery. Failure to preserve shattered limbs, in many instances, were chiefly for two reasons: First, want of skill and experience on the part of the surgeon; and,: second, because facilities were wanting. The question of performing immediate or secondary amputation was a disputed one among the most eminent authorities. Military surgeons recommended early operations, as a general rule. Past generations of surgeons entertained a constant dread of "inflammation or mortification." It was the custom of some surgeons to leave the wounds open and permit the breach to close by granulative tissue. This method was slow and painful and the retraction was so great as to frequently require a secondary amputation. He states in conclusion:

"We can, therefore, appreciate the difficulties which lay in the surgeon's path in serious traumatisms of the extremities, when the routine dressing for an amputation was a daub Peruvian-balsam and a wad of oakum; when the injured were indifferently fed and nursed; when there was a less intelligent public to deal with; when the patient was less disposed to bring the surgeon to court for mal-practice than now. If immeasurably greater facilities have been given to us (and, it must be added here, that New York provides for her injured with a lavish hand) our responsibilities have been proportionally increased, and what would pass as 'fair,' in the near past will not be excepted in our time."

Treatment of Gonorrhoea.

Clark (*Buffalo Medical Journal*) believes that acute cases of gonorrhœa, seen in their incipiency ought to be cured. He uses a combination of symptomatic or internal medication and a local treatment. For the purpose of relieveing the pain of micturation and rendering the urine antiseptic, he uses helmitol in 15 to 20 gr. doses, repeated every four hours, if necessary. This is a combination of anhydromethylin citric acid and hexamethylen-tetramin. Its action depends upon the liberation of formaldehyde, and it acts equally as well, either in an acid or alkaline urine. It is beneficial in the acute stages, especially of the anterior portions of the canal. With later cases, with renewed inflammation of the posterior parts, it relieves the pain and subdues the inflammation by its antiseptic qualities, and prepares the way for deep irrigations and the use of the sound. While it does not cure the cystitis of old cases, it relieves them to a considerable extent.

Hand injections by the physician, if possible, once daily are preferred to ir-

rigations for anterior inflammations, but irrigations are used for posterior portions. Protargol, in ½ to 2 per cent. solutions, are used for hand injections; or 1-300 or 1-500 for irrigations. In posterior urethretis canal and bladder should be irrigated with latter solutions, in connection with the passage of sounds, as there is always present some stricture.

Hallux Valgus.

Sheldon states (*Medical Record*) that it is generally believed that the condition is due to the wearing of improperly fitting shoes, which turn the great toes outward. That as the deformity increases, secondary changes occur with a subluxation of the joint and changes in the head of the metatarsal bone. He believes:

(a) That an improperly fitting shoe is never the sole cause of hallux valgus; (b) that hallux valgus, in the great majority of cases, occurs in feet so formed as to predispose to the condition; (c) that the extensor propius hallucis muscle plays a most important role in causing and aggravating the condition, and (d) that osseous changes, in the inner side of the distal end of the first metatarsal bone, are commonly found in severe cases.

That all of the cases of hallux valgus that he has seen have occurred in patients whose feet were of one type: instep hig; arch of the foot well formed; the extensor tendons of the great toes prominent at the metatarsophalangeal joint; the first phalanx of the toes extended and the distal phalanges flexed. He, after noticing the various methods of operating for this condition, gives his own as follows:

Once having removed the infected bursæ, the skin incision is made according to Dawbarn, except in cases with a tender bursæ. In these cases excise the bursæ and as much of the overlying skin as is compatible with complete closure of the wound. The next step is to free the inner portion of the distal end of the first metatarsal with a chisel or periosteotome. The inner one-half or two-thirds of the head of the bone is then removed with bone forceps. The outer one-third or one-half of the articular surface of the metatarsal and the phalanx are not disturbed. The extensor tendons of the great toe are then divided. The fascia and ligaments are then drawn to gether with catgut and the skin approximated with silkworm gut. The toe is held in proper position with a planter splinter and adhesive plaster. I usually apply a constrictor before operating; but, without constriction, the hemorrhage is slight.

He has operated on twelve cases in this way with invariably perfect results in three or four weeks. It assures a movable joint, there is no great toe shortening, and the deformity is corrected. If the bone is affected the abnormal part is removed; the space resulting from the removal heals by the blood-clot process, and the extensor tendons are so lengthened that the y do not tend to reproduce the deformity.

Dr. Wr. Cruther writes of felons (*Am. Jour. Sur and Gyn.*) and similar infections. In injuries of the hands and fingers, as much as is possible, the object of treatment is to cure the infection and save the function of the finger. He advocates early incision, as soon as the deep, throbbing pain indicates the character of the trouble. Deep incisions and large enough to find the pus. All these wounds are infectious, or become so as soon as operated on,

and should be so treated. "Open, disinfect and drain" puncture wounds. As to antiseptics: Iodine is a splendid antiseptic with exuberant granulations. Carbolic acid should be used when there is fear of serious infection. Phenol-camphor is used when healing is sluggish. It relieves pain, stimulates granulations and serves to kill any remaining microbes. Solution of chloral hydrate is an excellent stimulant of granulation. Bascillican ointment fills out depressions and rounds off corners, and thus saves deformities.

His greatest faith is placed in gauze drains, packed deeply, and partially removed or changed every day, and these kept moist, either with an antiseptic solution, or even plain water applied very warm.

Action of Radium on The Skin.

A. Haskin (*British Medical Journal,* Dec. 12, 1903) mentions the discovery of radium and polonium from the ore of uranium or pitchblende by M. Curie. The rays from these bodies have the same power of penetration as the X-rays, and a similar action on a photographic plate and fluorescent screen. The physiological action of these rays is to exert an inhibitory action on the growth of tissues. From radium are obtained two kinds of rays, one with great penetrating power, another with slight power of penetration but great power of being absorbed. The rays with feeble penetration have a strong bactericidal action, while the other kind have no effect on bacteria. Curie subjected his arm to the action of the rays for ten hours, and in fifty-two days an ulcer developed. From handling radium he developed a dermatitis of the fingers, accompanied by pain and scaling, which lasted over two months. The histological action of these rays was studied on the skin of a pig; 0.13 gramme of radium enclosed in a thin aluminum capsule was placed in contact with the skin for two hours. After thirty-eight days the skin was examined. The chief changes were in the blood-vessels, the walls of which were degenerated. The epithelium was also affected.

The Use of Hard or Soft Paraffin.

Dr. Albert E. Stein concludes, as the result of his experiences, that soft paraffin is less dangerous and more simple of application, and so is preferable for subcutaneous injections. He thinks that the use of paraffin for the prolapses in hernia, etc., is contraindicated, on account of the large amount of pariffin necessary. He sums up his conclusions as follows: (1) The method of paraffin injections is mainly adopted for the correction of small and superficial deformities, such that do not require the injectinos of large amounts of paraffin. (2) The paraffin to be used should have a melting point of about 41 degrees C. Harder paraffin should only be injected to fill up existing cavaties with solid walls. In all other cases it is contraindicated, on account of the greater danger of producing embolism. (3) The mass should never be injected in a fluid form, but is to be used in the form of a paste. (4) There are no sound practical nor theoretical reasons to justify our giving up the use of the soft in favor of the hard paraffin. (5) It is not advisable to inject more than 3 c. c. at one setting. (6) The injected mass is not absorbed but encapsuled, grown through with connective tissue, so that the result in all cases is a lasting one. (7) The oedematous swelling immediately following the injection, generally disappears in a few days.—*Medical Record.*

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., MARCH,. 1904. No. 3

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

Examination For Medical Students.

"It is not our purpose at this time to enter into a discussion of the advantages and disadvantages of various examinations systems, nor to say anything indetail about the conduct of an ideal primary or final examination, though we may perhaps do so later. We desire, however, to say a word about one feature of examinations for medical students that is too frequently overlooked, namely, the educational function observed. Too often by both student and teacher it is the selective function alone of an examination which is considered—the examination is regarded as a sieve which lets men whose attainments are of small dimensions fall through. But this selective process ought to be the least important feature of an examination. The main stress should be laid on the educational value of the test. The clearness of thought the accuracy and brevity of statement, the avoidance of tautology and irrelevant assertion that a properly conducted written examination cultivates, are qualities too often found wanting in the writings of those medical practitioners who have not gone through, as medical students, the careful training that a well conducted series of examinations can give. Again, an oral examination demands presence of mind on the part of the student, a readiness of wit, a coolness and freedom from embarrassment, if he is to do his best—and these also are qualities which, if well developed in student days, will stand the physician in good steed at the bedside and in the consultation room in later years. In a good practical examination, conducted by a master of the subject examined on, the student has the opportunity of showing what he has learned to do, rather than what he has remembered by cramming, and of illustrating the extent of his assimilative knowledge rather than the dimensions of his portative capacity.

The educational value of an examination will, of course, vary enormously with the character and professional ability of the man who sets it An ex-

amination ought always to be a sanction for the highest kind of teaching in thecourse or courses preceeding it, and ought, by its results to set the stamp of approval on the best kind of study and practical work. We shall not have solved the much vexed examinations who, having the best natural capacity, have had the best instruction, and have done their work in the best possible way."

Anent the above clipping from an editorial in the *Jour. Am. Med. Asso.*, Oct. 24, 1903, which we most cordially endorse, we would offer a suggestion to recent graduates, who have passed the examinations before their State boards. All physicians recognize the importance of keeping abreast of the times in their studies, and those of a few years out of college recognize, too, how rapidly the theoretical parts and the minutia of their college day studies slip away from them in active, practical every day work. It is their desire to keep up with this, but many, possibly most of us, fail to do so. As a matter of mental discipline and as an aid in keeping in touch with this part of the study of medicine, it would be well to take the examinations of their State boards as they are published annually and make written answers to them under the same rules and regulations, as far as practicable, as if undergoing the examination for license.

Specialism in Medicine.

From time immemorial there has been a certain degree of specialism in the practice of medicine. In this the physician has but followed natural laws which has divided practice into channels in accordance with the underlying needs of the various conditions presented in the correction of abnormal states. To-day the great division of practice into surgery and medicine has almost brought the treatment of disease into two distinct sciences, yet with a very close connection between the two in the necessity there is for a knowledge of anatomy, physiology and pathology of the whole system as an essential factor for either.

It is nothing new to say that the practice of medicine in all its branches is too large for one man to grasp, or that disease can be better studied if the faculties are centered upon one subject. The recognition of these facts is in part accountable for specialism, as we find it at present, and its importance is evident.

The growth of specialism has been in line with the advances in medical science. We might say that it was even more than this, as very many, if not the the large majority, of the facts that add to our knowledge of diseased states come from the specialist, either in clinic or laboratory. The general practtitioner is the beneficiary of the labors of the specialist in many ways, and the specialist is dependent upon the general practitioner for his material to a large extent. There is as much necessity for harmonious action between the two as anywhere in the practice.

Specialism is essential, but it should grow, not be selected and special preparation made for it. We mean by this that a doctor should not undertake a special line of treatment or the treating of special organs until he has been in general practice for some time. The specialist is prone to overlook diseased states in other organs other than the one to which his practice is limited, and the time spent in general practice is needed in order to become familiar with disease in general. His special aptitude for a definite line of practice, or his success in treating a certain line of troubles will almost certainly bring patients, and con-

sultations needing his services. He thereby gains experience in his line, and there is no reason why he should not pay more attention to it; or, if the situation will justify it, limit his practice to this special class of diseases.

There is a danger line to this growth of specialism, as well as in most other things—perhaps more than one point of danger. First, are we not dividing up the practice too minutely? The functions of many of the different organs of the body are so intimately associated with each other, their action blended and dependent upon one another, that a diseased state of one can hardly exist without influencing another, or perhaps many other organs. The three great natural divisions of practice —medicine, surgery and obstetrics—are recognized, and some minor divisions are admissible, but it strikes us that too minute a division, as for instance, treating one disease only, is hardly consistent with the best work.

A United Medical Profession.

We have received from the author, Dr. Chas. S. Mack, of La Porte, Ind., a pamphlet, with the title, "Are We to Have a United Medical Profession?" This is published, and is for sale, by the author, at twenty-five cents a copy.

The pamphlet is, we presume an exposition of the principles of Homeopathy, and practically an invitation that all schools should unite on these principles.

We confess to a very limited knowledge of the teachings of Homeopathy, and belong to the category of critics, consisting of Drs. Alfred Stile, T. Lander Brunston, H. C. Wood and F. W. Headland, to whom Dr. Mack devotes a chapter, as betraying a lack of knowledge of what Homeopathy is, or what it purports to be.

Our first impression of Homeopathy was obtained as boy, when we saw an old woman extract three hairs from the end of the tail of a dog, and apply them to the bite of the dog on a companion, with the assertion that like cures like. We would not discuss this subject in the vein indicated by the impression thus gained, but realize that the impression has been a lasting one,

We have read the pamphlet with interest, and we trust with profit, but we are not impressed with the reasonings.

We have always understood rational medicine to mean the use of any remedy of whatever character that will alleviate suffering, correct pathological conditions or cure diseased state. This, it seems to us, is as broad a platform on which to unite the medical profession as can be desired. If the profession is ever united it must be on a basis of this character. Nothing short of this will meet the needs of the situation. We have no controversy with those who accept homeopathy as a part of the principles on which the alleviation and cure of disease is based. It is when the law of similars is set up as the only principle for the practice of medicine, and to the exclusion of all other plans and indications, that it becomes a dogma and cannot be allowed. As desirable as a United profession may be, it would be disastrous to sacrifice principles believed in and acted upon for ages in order to secure it. These principles must first be proven erroneous. This the homeopath has not done, but offers instead, for our acceptance, a dogma that "like cures like."

The law of *simila silmilibus curanter* is claimed to be the law of nature, that pervades all things—in thought and feeling as well as in flesh and blood. Acting upon this, we are asked to administer medicines, whose effect upon

the normal condition would produce the symptoms presented, and are informed that these medicines cure by immediate effect. The word immediate here is explained as having no reference to time, but means the effect to which no other effect is immediate. This law is claimed to transcend the possibilities of rational medicine, and, candidly, we believe it would if there were such a law, or its interpretation correctly given; we may be obtuse, but we have not yet been able to see such a law, either in the mental or physical world, nor do we see the force of Dr. Mack's reasonings on this question. As an illustration of the meaning of immediate effect of a medicine, we quote from his pamphlet (page 7): "In a case of typhoid fever, the outcome or remote effect may be health, whether the medicine given be homeopathic, or be stimulant, or be germicidal, or be chemically antidotal, or be something else; or the outcome may be health when no medicine at all is given. In a case of typhoid fever, the immediate effect of a stimulant is different from that of a germicide, and the immediate effect of either is different from the immediate effect of a chemical antidote. Like the immediate effect of any one of these, the immediate effect of a homeopathic medicine is a change from what is abnormal to what is normal (or approximately normal) in vital processes."

The laws of nature are inexorable. There is no change in them, and if as is claimed, the law of *simila similibus curanter* is a law of nature, and the adherents of this doctrine or belief have interpreted it correctly, there should be no trouble in producing the change from what is abnormal to what is normal (or approximately normal) in the treating of diseased conditions by the administration of homeopathic remedies. That this is not accomplished is a self-evident fact ever before us.

We owe something to this school for the good it has accomplished in teaching us, or perhaps accentuating the fact, the self-limitation of many diseases. That its adherents are inconsistent is shown by their use of the means advocated by the school of rational medicine in treating diseased states, though Dr. Mack claims that one can be enthusiastic, both over homeopathy and rational medicine. We see no reason why an adherent of the school of rational medicine may not use a homeopathic remedy, when experience demonstrates its utility, for rational medicine stands upon a platform broad enough to accept any remedy for the alleviation of suffering or cure of disease. Rational medicine prompts us to ascertain, if possible why a remedy is beneficial, and in this is a decided advantage upon the principles advocated by homeopathy.

We have no quarrel with those following a special line of treatment, but if there is to be a union of the different schools, it must be on a broader platform than that offered by a class restricting medicine to one particular line.

Importance of Circumcision.

Dr. John T. Burrus, of Elkin, N. C., in a letter to the Editor, lays great stress on the importance of circumcision as a preventative measure in venereal diseases. The doctor takes the position that this operation should be done on every male child during the first few days of its life, and does not hesitate to perform the operation immediately after birth. He regards this measure of such value and importance to the good of the race that he urges it upon all parents in his practice, and earnestly advises all practitioners to do likewise. He believes that great good has

fallen to the Jewish people as a result of this custom and having the courage of his convictions, he would see all male children circumcised for the following reasons:

1st. It permits a more perfect development of the male organ, thus causing stronger erection.

2nd. It is in line with the laws of cleanliness.

3rd. It checks, in fact, almost prevents the formation of the habit of masturbation.

4th. It greatly hinders the spread of venereal diseases.

The two latter facts form the basis of the doctor's convictions and on them he lays great stress.

Tribute to Dr. Emile de Schweinitz.

By Ch. Wardell Stiles, Ph. D.

(Consulting Zoologist, U. S. Bureau of Animal Industry; Chief of Division of Zoology, Hygenic Labratory, U. S. Public Health and Marine Hospital Service.)

My Friends:

In coming from the seat of the National Government to North Carolina upon this occasion, I feel that I come not only officially as the representative of the United States Department of Agriculture, but unofficially also as the spokesman of the American medical investigators. Further, it is difficult for me to escape the impression that I am accompanying my brother to his last resting place. Dr. de Schweinitz and I were in intimate official and personal association almost daily for about thirteen years. For six years we met three times a day at meals. At my wedding he served as best man. Since then, my home has been open to him day and night as if it were the home of his own brother. Under these circumstances, you can well imagine that I esteem it a high favor and feel it to be a sad pleasure that the Secretary of Agriculture detailed me to come with Emil today to his boyhood home.

Dr. de Schweinitz was a biochemist. That is, he was investigator in a special branch of medicine requiring an unusual combination of qualifications. To be successful in this field of work a man must be an expert chemist; he must be well read in both human and comparative medicine, especially in regard to the infectious diseases; he must be an authority in certain lines of biology; he must be a well trained linguist; he must be a logician, able to comprehend the full significance of a given combination of premises and to draw from it safe and conservative conclusions—for upon his conclusions may depend the life or death of a number of people; he should be able to distinguish between necessary and unnecessary pain; he should have regard for life, not only of man, but of animals; he should respect death; he should be not only a broad but also a deep thinker; further, he should be an original thinker, not content always to follow in the mental footsteps of other men, but he should be a surveyor and builder of new mental roads; he should be a keen observer, able to describe accurately what he sees and see acurately what he describes; he should be a man of courage, both physical and moral—of physical courage so that he may be able at any moment to face a situation in which a slight mistake on his part, as the slip of his scalpel, means almost certain death to him—yet he must meet that situation with the same calmness, the same presence of mind, and I was almost on the point of saying the same pleasure, that he meets his own family in his own home; of moral courage so that he will, in the interests of truth, always be open to conviction relative to his own mistakes and ready and willing to acknowledge

his errors; he should be a charitable man, who lays greater stress upon the discoveries made by his competitors in science than upon their mistakes; in his daily life he will come into contact with joy and sorrow, with comfort and suffering, with health and disease, and with life and death in many different forms.

Such were the character, the characteristics, the qualifications and the life of your relative and friend, and of my colleague, and he was successful in his chosen profession.

In his own family he had two sterling examples in science and medicine: His grandfather, Rev. Lewis David de Schweinitz found time aside from his theological studies to delveinto the secrets of nature as hidden in plants, and as botanist he is to-day still held in high esteem. Emil's cousin, Dr George de Schweinitz, of Philadelphia, is among the leading occulists of this country. Thus Emil had before him a family standard, below which he dared not fall. Let me assure you that he lived up to that standard, and of this his family may well be proud.

In thinking over our fellow citizens, we are all likely to build in our minds a Hall of Fame, each for his own State. There is a tendency to place upon its roll of honor especially our soldiers, our sailors, and our marines. This tendency is perfectly justified, but I ask people of North Carolina, while constructing your hall of fame do not forget your scholars, for these, as well as your soldiers, sailors, and marines, may be heroes.

Never has a soldier-son of North Carolina marched into the dangers of battle with a lighter step than Emil de Schweinitz marched into the dangers connected with his daily work. Never has marine from this State faced the flying bullets of a visible enemy with a clearer sense of duty to his fellowmen than Emil had when facing the most deadly poisons of those unseen enemies of mankind—the germs of fatal and infectious dieases. Never has a North Carolina sailor more heartily or more justly rejoiced at a victory he helped to win, than Emil has done when he conquered some difficult problem and unveiled a hidden truth which might be turned to practical use in saving human or animal life.

At the present moment it is difficult to give a correct estimate of Emil's exact position in American medical science, but it may be safely asserted, without fear of criticism or contradiction, that he was one of the leading authorities, not only of this country, but of the world, in his particular field of work, especially in connection with immunity from tuberculosis. It may be safely predicted that after the generations of his family at present living have passed away, and when the chief family memory of this scholar will be his name in the family genealogy, the official city record of his burial, and a cold slab of white marble bearing the date of his birth and death, even then, his name, his works, and his discoveries will still be alive and influential; human lives will be saved because of human knowledge based directly or indirectly upon his studies, and the American farmer will benefit because of work Dr. de Schweinitz has done.

In thinking over the medical scholars North Carolina has produced, it is my judgment that Emil de Schweinitz stands high in the list. At this moment I can recall only one other North Carolinian (and he was an adopted son of this State) who can be ranked with him in the field of research work bearing upon the great problems of immunity to

disease. As a scientific man, coming from an entirely different part of the country, I hold that the name of the scholar and scientist, Emil de Schweinits, undoubtedly belongs on your State Roll of Honor and in your State Hall of Fame.

In connection with his scientific attainments, it is fitting that I should read the resolutions adopted yesterday by his colleagues in official life in the National Government, and entrusted to my care to deliver to you:

Resolved, That we, the associates of Dr. Emil A. de Schweinitz in the Bureau of Animal Industry, have heard with deep regret and profound sorrow of his sudden and unexpected death.

Resolved, That we hereby record this expression of our appreciation of his many sterling qualities as a friend, an official colleague, a scholar, and a citizen. From long association, he was highly esteemed as a friend and a fellow worker. As a scientist and investigator he was eminent, and his work at the head of the Biochemic Division, from its organization has contributed largely to the reputation and prestige of the Bureau. His death, therefore, comes both as a personal bereavement to his associates and as a heavy loss to the bureau as an institution.

Resolved, That we extend our sincere sympathy to his family and friends.

D. E. Salmon,
James A. Emery,
A. M. Farrinton,
Ch. Wardell Stiles,
John R. Mohler,,
Committee.

Washington, D. C., February 15, 1904.

Dr. de Schweinitz was not only a scholar and an investigator, but he was also an educator. It was not enough for him to learn, but he imparted that learning to others. He was Professor of Chemistry in the Medical Department of Columbia University, and because of his exceptional ability as an administrative officer he was for a number of years Dean of the Faculty. It was largely owing to his brains, his ability, and his energy, that Columbian University was recently enabled to erect a new and splendid medical building where future generations of physicians may be taught to heal the sick. It was likewise largely due to him that the University has recently built a hospital in which the injured may be cared for and the suffering may be relieved. It was in that hospital, built of his very flesh and blood that he finally drew his peaceful breath, passing away without a struggle and surrounded by colleagues and friends.

In testimony of his ability, his university colleagues have adopted the following resolutions:

"A great calamity has befallen the medical and dental departments of the Columbian University in the death of Dr. Emil A. de Schweinitz, professor of chemistry and toxicology and dean of the medical faculty.

Dr. de Schweinitz became professor of chemistry in 1893, and four years thereafter (1897) he was appointed dean of the medical faculty. He filled both positions with marked ability until his death on February 15, 1904.

Not only was he admired and beloved by the students for his ability as a skillful teacher, both in the lecture room and laboratory, but his gentle and kindly interest in their welfare won for him their devout regard and unlimited esteem.

In his work as dean of the medical faculty he displayed unusual executive ability. In the equipment and internal arrangement of laboratories for the new college building he labored with untiring industry, care and skill; and in the

establishment of a hospital for the medical school (for which many of us worked conjointly) it may be safely said that in the original design of this institution the leading spirit whose persistent and energetic efforts became a prime factor in the development of the enterprise, and whose never-failing hope encouraged those of us who were inclined to despond, was the progressive and unrelenting spirit of Dr. de Schweinitz.

In thus recording our appreciation of his valued services to ourselves and our university, we must not neglect also to join with the world of scientific medicine at large in commending his important labors in the domain of original research. His work in bacteriology, in the investigation of tuberculosis and other infections diseases, both in men and animals, has won for him deserved distinction and renown.

Cut off suddenly in the prime of his manhod and professional usefulness, we devoutly mourn his untimely end. In his demise we have lost a friend, counselor and companion whom we had learned to love, honor and admire.

We offer to his bereaved relatives our tenderest sympathy.

D. Kerfoot Shute,
C. W. Richardson,
W. P. Carr,
Committee."

Here in his boyhood home, you will erect to his memory a cold monument of dead stone which will finally crumble to pieces. In American medical literature, each of his discoveries will represent a more enduring monument to keep his memory and his influence alive. At the seat of the National Government, the patients whose lives are saved in the hospital which owes so much to him will serve as living monuments of his foresight, his industry, and his ability.

Dr. de Schweinitz was born in Salem, N. C., and was one of the foremost medical scholars the State has produced. He suffered a severe attack of typhoid fever last summer, after which he never fully regained his strength. Sunday morning, February 14, he was apparently in the same condition that he had been for a number of months past. At 2 P. M. he was taken sick, at 4 P. M. he walked to the hospital. He became unconscious that evening and died at 11:48 A. M. Monday, February 15, of acute nephritis.

The funeral exercises in Washington were held Tuesday evening, February 16, at the residence of Dr. Charles W. Richardson, and were conducted by the Rev. Dr. Sterrett, of Washington, D. C., a personal friend of Dr. de Schweinitz, and Rev. Dr. Paul de Schweinitz, of Bethlehem, Pa., a cousin of the deceased. The remains were accompanied form the house to the railroad station by a guard of honor on foot in addition to the carriages. This guard of honor consisted of the officers and male employees of the U. S. Bureau of Animal Industry, the faculty of the Columbian University, the entire student body of the Medical and Dental Schools of Columbian University, delegates from the Masonic lodge of which he was a member, and a delegate from his college fraternity, Beta Theta Pi.

Dr. de Schweinitz was interred in the Moravian graveyard in Salem Wednesday afternoon, February 17.

Physicians cannot be too accurate in their prescriptions.

Communication.

Richmond, Va., March 14, 1904.

Editor Carolina Medical Journal:

It has just come to our notice that one J. Sills Daniels, M. D., of this city, the proprietor of a so-called Cancer-cure Sanitarium, and Sanitarium for the treatment of diseases of women, especially obstetric cases, an asylum for the unfortunate, etc., who also offers a diploma as a member of the Hospital Staff, for a consideration to any physician desiring it, has without knowledge or authority, announced us as Consulting Physicians of the said Sanitarium. We desire to stamp such a statement as a piece of unwarranted impertinence, and absolutely without any foundation in truth.

(Signed.)

J. N. Upshur, M. D.
Jacob Michaux, M. D.
Landon B. Edwards, M. D.
Ramond D. Garcin, M. D.
B. L. Talioferro, M. D.

Deaths.

Dr. Robert Edward Zackary, of Wilmington, died on March 12th from complications following an operation for acute appendicitis.

Dr. W. W. Clark, of Old Fort, died after an illness of several weeks, on Monday, February 14th, in his 45th year. Dr. Clark was a native of Haywood county, but for the past six or eight years has practiced his profession at Old Fort. He is survived by a wife and three sons.

Resolutions of Respect.

At a meeting of the Gaston County Medical Society, held in February, the following resolutions of respect were adopted:

Whereas, we, The Gaston County Medical Society, have learned with profound regret of the death of our esteemed friend and brother physician, Dr. Robert E. Jenkins, of Belmont, N. C., and,

Whereas, Dr. Jenkins, by his nobility of character, and scientific attainments, and devotion to the sick, endeared himself to us as a man and as a physician, be it, therefore,

Resolved, That we, members of the Gaston County Medical Society, fully realize and feel that by his death the Medical Society of Gaston County has sustained a grievous and lasting loss and furthermore be it

Resolved, That we tender our sincerest sympathy to his family in their bereavement, and further be it

Resolved, That a copy of these resolutions be spread in full upon the minutes of this society, together with a short sketch of his life.

By order of the Gaston County Medical Society.

R. M. Reid, President.
L. N. Glenn, Secretary.

New Medical Journals.

The following new medical journals have been launched since January 1:

Southern Medicine and Surgery, Chattanooga, Tenn. Dr. Raymond Wallace, Editor; Dr. B. F. Travis, Managing Editor, with list of collaborators.

The Medical Recorder, Shreveport, La. Dr. Oscar Dowling, Editor; Drs. Louis Abramson and R. H. T. Mann, Associate Editors.

Southern Medicine, Savannah, Ga. Dr. W. E. Fitch, Editor. A revival of the *Georgia Journal of Medicine and Surgery.*

Selections From Our Exchanges.

Treatment of Contused Wounds.

S. D. Powell, in a clinical lecture published in the *Post-Graduate*, gives the following concerning the treatment of the crushed, lacerating and mutilating wounds caused by machinery:

"Do not make the mistake of cutting off anything. If the end of a finger is hanging on by nothing but a very thin tissue, lay it on and leave it alone. Do not put any stitches. It is bad surgery. You may carry an infection up the hand, and instead of getting a closed wound, you may get infection that may cost the patient his finger, hand or life. Put the limb in a position where it will be quiet, cover it up with gauze and cotton, use a splint, if necessary, to hold the limb in position, and then keep it wet with a two per cent. solution of carbolic acid. Do not put on a tight bandage. Then the time will come when the tissue that you tought was gone will be good tissue.—*Ibid.*

Treatment of Absesses.

M. Porsz, of Budapest, explains that if any one has once used a 2 to 5 per cent. solution of nitric acid in treatment of abscesses, he will never treat them in other way, as the effects are so satisfactory. He first evacuates the pus and then injects the solution with a urethral syringe as forcibly as possible. The abscess cavity becomes distended with the fluid which penetrates into every crevice and seems to stimulate the tissues in their work of repair after the germs in the lesion are killed by the action of the acid. In very deep buboes it may be necessary to repeat the injection daily, but healing is usually complete after two injections. The severest cases are healed in a week in his experience. — *Klinisch-Therap. Wochft., X.*, No. 33, 1903.

Care of Catheters.

Nothing is more annoying than to be prepared to use a catheter and find it unfit, dangerous, or totally useless. Yet many practicians treat their catheters less carefully than they polish (or fail to polish) the nickle plating on their instruments. With perfect care, a catheter will last a long time, and will always be in condition for immediate use

1. Immediately after use hold the instrument in running boiling water for three minutes, and make certain that the water enters the lumen of the instrument as well as flows along the outer sides.

2. Scrub the instrument with brush and soap and water.

3. Rinse well, and place in a bottle of glycerin, to which a drachm of formaldehyd has been added to each two ounces of glycerin.

4. When wanted for use, remove from formalized glycerin and rinse well in steril water; lubricate with sweet oil or vaselin.

5. After use, cleanse immediately and replace in formalized glycerin.

6. If it is inconvenient to keep the catheters in a bottle, clease at once after use, shake well, and hang up in a warm place, by sticking a pin through the head of the distal end; when dry, wrap in strile cloth or paper.

Catheters may be conveniently and quickly sterilized by washing in water to which an ounce of formaldehyde has been added to a pint; dry as above.—*Medical World.*

The Dangers of The Handkerchief.

According to a NewYork paper, the question of welcoming speakers at the recent meeting of the National Woman's Christian Temperance Union by the fluttering of handkerchiefs was discussed by the members. One of the

members declared from a hygienic standpoint the habit was a most reprehensible one, distributing as she claimed the germs of colds and grippe. The lady was unquestionably right in her declarations, as it is now generally admitted that the majority of colds are of germ origin and therefore highly infectious. The practice of blowing the nose into a handkerchief, and then carefully placing it into the pocket to harbor germs, is a bad one, and undoubtedly causes many a coryza that might otherwise be avoided. It would be a distinct advance if we should adopt the method followed by the Japanese of using handkerchiefs of tissue paper, and throwing them away immediately after using them once.—*Medical Age*

The abuses of club practice are rather emphatically shown by a communication in the *British Medical Journal*, January 16, signed "One of the Crushed Doctors." In the community in which the correspondent lives, we are told that a medical man cannot even afford a horse, much less leave his practice for a holiday. The amount of medical and surgical work he has to do for nothing is appalling, and if he airs his grievances to the workingman he becomes a monster in that man's sight. Educated people respect the doctor and consider him a gentleman, but the working class, which makes up the larger portion, gives an ignorant nod, and familiarly calls the doctor "Jones" or "Smith." If one tries to collect his bills in court, he receives only the sneers of the crowd and gibes of the judge for his time, worry, anxiety, loss of sleep, and he has spent 20 shillings to collect 15. He says that his experience in this respect has been so bitter that, unless paid at once, he never keeps count of the items, and is happier and better off. The only remedy this doctor sees is in organization in the profession. Physicians must stand together and make their power felt. He says the good money, the easy and spare time, the privileges, the voting power, "the jaunting about, the spending of valuable time and money in betting, gambling, and public houses, the eating and stuffing, the gaudy and expensive dressing, together with the throwing of wholesome food to the rubbish heap," belong to the workingman, not to the doctor, in his community. Altogether, it would seem that this "crushed doctor" must be living in a pretty hard community. We have not the evil of club practice in this country to the extent that this contributor indicates, but we may have it, if we are not more watchful than we are at present. There are thousands of physicians in this country who are working for an income less than that which the average skilled laborer now receives, and with little prospect of improvement. Shall we permit ourselves to fix this condition for a still larger number of our profession by passively permitting club practice to be established among us?—*Journal American Medicine.*

The Pathology and Treatment of the Patella.

Dr. S. C. Plummer, at a meeting of the Chicago Surgical Society, after considering the arguments for and against the operative treatmen in recent fracture of the patella, proposed the following as a fair statement of the present status of the question of treatment of recent simple transverse fracture of the patella:

1. Operative treatment should never be undertaken except under the best conditions for maintaining asepsis.

2. Presupposing ideal septic condi-

tions, not every case should be subjected to operation, but only in healthy patients of suitable age, with at least half an inch of separation of the fragments and lateral tears which compromise the " reserve extension apparatus," or in patients following arduous occupations.

3. The operative treatment fulfils all the indications for treatment in a manner which the non-operative method can only partially achieve, but good functional results follow the non-operative treatment as a rule.

4. Early massage in all cases favors the early and complete restoration of function of the joint, and should be used in all cases.

5. If operative treatment is employed, the open orthrotomy should be used.

6. Absorbable suture material applied to the soft parts is sufficient in nearly every case.—*Annals of Surgery.*

Dangers of Plugging in Epistaxis.

Landouzy (*Medical Press,* July 1, 1903) draws attention to some of the contraindications in plugging the nasal fossæ in epistaxis.

Apoplexy may result from this procedure, and reference is made to a number of cases in which this has been the result, especially in the aged. In one case, plugging with perchloride of iron seems to have produced erysipelas with very grave symptoms.

Nasal hemorrhage opening the vessels of the pituitary lowers the treatened arterial hypertension, frequently relieving the vessels of the brain and conducing to the safety of the patient.

The treatment should not be begun by pluggging the anterior and posterior orifices. In young persons with healthy arteries this might be permissible, but plugging the nasal fossæ in aged persons is dangerous. Perchloride of iron should never be used.

Simple methods should be tried first, as pinching the nose, elevation of the arms, cold water, key down the back, etc. Afterwards small plugs steeped in a solution of antipyrin may be applied through the anterior nares, or the nasal passages may be irrigated with hot water. These methods will be sufficient to at least moderate the hemorrhage, if not to arrest it. It is better in any case that the vessels open in the pituitary membrane than in the brain.

Dry cupping in the lumbar region, purgatives, mustard foot-baths, applications of hot water to the abdomen, should all be resorted to before plugging.

Treatment of Naevi.

Dr. John P. Lord, at a meeting of the Western Surgical and Gynecological Society, read a paper on this subject:

He discussed the varieties of nævus, their etiology and pathology, and reported several interesting cases. He stated that the hot water treatment of cavernous angiomas, as suggested by Wyeth, was under trial, and would doubtless have a place in the treatment of selected cases. The treatment of port wine marks by electrolysis was too tedious and painful for large areas. The results were not perfect, in that they were seldom complete, and left some scarring. The *x*-ray promised better, and hot air would seem to have possibilities. Electrolysis occupied first place in hairy nevi, and would probably continue do so unless the *x*-ray would produce atrophy of the hair follicles. The operation of excision of very large tumors would probably never be supplanted by anything less radical; and hitherto inoperable tumors were rapidly yielding to the control of the operators of the new century.

Circumcision for Congenital Phimosis.

J. F. Woodwyatt, M. D., based upon the observation that the condition preventing the retraction of the prepuce is due to tightness of the mucous membrane, and not to contraction of the skin, which is not usually redundant, employs a plastic operation which gives much better results than circumcision. The prepuce is contracted as far as it will go, when the constricting mucous membrane is cut with sharp-pointed scissors, the prepuce being retracted as the stricture is relieved. Cutting down as far as the corona, adhesions are separated and and smegma removed. This longitudinal incision in converted into a transverse one by a suture approximating the ends of the incision. One or two sutures are inserted on either side to bring the mucous membrane into close approximation.

The advantages claimed for the operation are:

1. The small size of the wound.
2. No tissue is removed .
3. The facility with which the operation is performed.
4. The result is much better than that from circumcision, the glans often being left covered by skin, which is seldom the case after circumcision.—*Archives of Pediatrics.*

The Cure of Boils.

A . K. Bond says that the first thing to do is to quarantine the existing boils, so that no more pus may be carried from them by the fingers, or in any other way, to other parts of the feeble skin. To this end, antiseptic dressing is necessary. If the core of the boil is loose it should removed by dressing forceps. Cleansing the wound hole with peroxide of hydrogen, and dressing with calomel and bismuth will probably secure as quick healing as in any other wound. If the core of the boil is not loose, cut it out with knife and scissors. The core itself is insensitive. Where, however, bacteria foci are bound down by dense fibrous tissue, or wherever pus is shut in, the adjacent healthy tissues will be extremely sensitive. The application of pure carbolic acid on an applicator in advance to the knife or scissors will usually anæthetize the wound sufficiently to permit of thorough work. Peroxide of hydrogen is a great aid to the cleansing, but takes much time. Suppuration will not cease until all affected tissues have been removed. As pure carbolic acid favors suppuration, the last traces of necrotic fibrous tissues in the depths of a deep excavation may better be removed by dressings of pure alcohol. It gives severe pain on the first touches to the wound, but then anæthesthetizes the parts it has touched. Fibrous sloughs seem to clear away under if more quickly than under carbolic acid. A plug of gauze soaked in alcohol may be left in the wound. The top dressing should be of cotton to keep the sick tissues at even warmth, and slight pressure to support the tissues is helpful.—*Louisville Monthly Journal of Medicine and Surgery.*

Among the peasants of Southern Italy, Sicily and Sardinia, a curious malady has been noticed by physicians, which is caused by eating beans. One of the most remarkable effects of the malady is a species of intoxication resembling that produced by alcoholic drink. In some cases, persons predisposed to the malady are seized with the symptoms of intoxication if they pass a field where the bean plant is in flower. The odor alone sufficing to affect them. —*Spatula.*

NEWER MATERIA MEDICA.

Infantile Anaemia.

REPORT OF CASES.

Treated at City Infants' Hospital, Randall' Island, New York City, during a period of four months, by Mateo M Gullen, M. D., House Physician and Surgeon.

The various conditions of blood impoverishment grouped under the general head of "Anaemia" have been the subject of empirical study and treatment since the beginning of medical history, there being no scientific data giving us a correct guide for either recognizing the condition or noting any improvement therein. With the development of the science of haematology, the clinician has been given a definite index of the true condition of the blood and the effect of treatment upon the same; and so from this point each stage of improvement and what would cause improvement could be studied.

Thus far, however, this has been true only of the blood of adults; the haematology of infants is still under investigation, comparatively little work having been done in the line of controlling by laboratory methods the improvement of infantile anaemia under certain therapeutic measures.

With this end in view the author took advantage of the opportunity afforded by the almost inexhaustible material at this hospital, feeling that it would be of interest, both to himself and the profession at large, to watch the improvement of the blood of these little patients under the influence of iron.

We chose iron as our haematinic, first, because we believe it to be the most easily borne drug of its class; second, because our investigation was carried on during the summer months, when cod-liver oil is contra-indicated. We selected what we considered the most bland and unirritating preparation of iron, Pepto-Mangan (Gude), and our judgment was justified, as in no case did we have to suspend treatment on account of any untoward influence on the delicate organism of sick infants. Only in a few cases were we obliged to resort to the occasional aid of a laxative to overcome any constipating influence.

Our selection of cases included the widest range, consisting of anæmia of tuberculosis, marasmus, broncho-pneumonia, gastro-entritis; in fact, the whole gamut of the common diseases of infancy.

In each case an exact and painstaking blood examination was made before giving the remedy, and, after a specified time, a second count was taken.

The following are some of the case-histories of especial interest:

Case I—E. P., age seventeen months; admitted May 6, 1901, age four months. Mother died when child was two days old; no history of syphilis or tuberculosis. On admission had a mottled, bluish appearance; slight discharge from the eyes; greatly emaciated; physical condition apparently hopeless; weight 5 pounds 8 ounces. Was wet-nursed until May, 1902. At this time (May 3), it weighed fifteen pounds four ounces; had a large abscess back of ear. June 11, 1902—Showed a waxy pallor, marked anæmia of conjunctivæ and other mucous membranes; spleen perceptibly enlarged liver slightly so; axiliary, cervical and inguinal lymphatics also enlarged. Blood examination: Red cell, 3,366,000; white cells, 16,000 per cmm. Hæmoglobin, 20 per cent. Differential count of the leukocytes showed 48 per cent. of lymphocytes. Treatment: Pepto-Mangan (Gude) dr. 3ss, t.i.d.

July 22, 1902.—Patient somewhat improved; weights 11 pounds 12 ounces. Combined arsenic with Pepto-Mangan.

August 11, 1902.—Weight sixteen pounds twelve ounces.

September 16, 1902.—Weight, nineteen pounds eight ounces. Patient's general condition very much improved; color very much better; patient cheerful and beginning to walk. Blood examination: Red cells, 3,466,666 per cmm.; white cells, 8,000 per cmm. Hæmoglobin, 58 per cent. Glands, spleen and liver still enlarged, but becoming smaller.

Case II.—K. T., aged twenty-four months, female, white. Admitted June 1 General condition fair, nourishment fair, color pale. Had scarlatina five months ago and diptheria two months later. Bowel movements have been loose, green, offensive, with some mucous for the last few days. Slept well appetite poor. Very thirsty.

June 11—child emaciated, very weak and pale. Mucous membranes of conjunctivæ, lips and mouth very anæmic. Appetite poor. Bowel movements have been yellow for the last two days. Child had never walked. Blood examination: Red cells, 2,533,333 per cmm.; white cells, 10,000 per cmm. Hæmoglobin, 40 per cent. Treatment: Pepto-Mangan (Gude) dr. 3 j, t.i.d.

July 1—Patient has improved some; three pounds gain in weight

August 8—Very much improved; has gained seven pounds.

September 2—Patient apparently in good health; is able to walk Blood examination: Red cells, 4,851,851 per cmm.; white cells, 7,133 per cmm. Hæmoglobin, 75 per cent.

Case IV.—H. V., aged nineteen months, female, white; twin sister of case IV.; admitted June 11, 1902. Mother died of pulmonary tuberculosis; a young brother also died of the same cause; father, tuberculosis. Since admission has been delicate and anæmic. Had several attacks of bronchitis. Bowels normal. Blood examination: Red cells, 3,132,000 per cmm.; white cells, 5,600 per cmm. Hæmoglobin, 57 per cent. Treatment: Pepto-Mangan (Gude) dr. 3 j, t. i. d.

July 12—Child improving very much and gaining in weight.

August 11—Patient had a rash all over the neck and spreading down the body; Koplick's sign present. Diagnosis: Measles. Removed to quarantine ward.

August 18—Child had very bad cough; consolidation in upper left lobe. Blood examination: Red cells, 4,580,851 per cmm.; white cells, 12,300 per cmm. Hæmoglobin, 69 per cent. The child looked very ill; high temperature and frequent respiration.

August 25—The patient was very weak. Broncho-pneumonia over back of both lungs. Refuses nourishment. Blood analysis shows very marked anæmia and leukocytosis (sepsis). Red cells, 3,012,300 per cmm.; white cells, 15,600 per cmm. Hæmoglobin, 40 per cent.

August 29—Patient died. Autopsy revealed Broncho-pneumonia of both lungs and tubercular bronchial glands.

Case XIX.—W. B., colored, male, aged three and onehalf years. Admitted June, 1902, having come to us from Dr. A. Jacobi's ward, Roosevelt Hospital, with the diagnosis of pulmonary tuberculosis. Patient had been apparently well until nine months ago, when he had an attack of pneumonia, from which he never fully recovered. His condition was extreme; emaciation, harrassing cough, sputum contained tubercle bacilli. Two weeks after ad-

mission, he had a pulmonary hemorrhage of about six or eight ounces, brought on by a severe attack of coughing. He was confined to bed for ten days. Temperature, 104 degrees; pulse 164; respiration, 64. After that he was kept in the fresh air daily. Blood examination: Red cells, 3,947,676 per cmm.; white cells, 10,500 per cmm. Hæmoglobin, 42 per cent. Treatment: Guaiacol carbonate and Pepto-Mangan (Gude) dr. 3 j, t. i. d.

September, 1902—Blood findings: Red cells, 4,977,777 per cmm.; white cells, 9,500 per cmm. Hæmoglobin, 58 per cent., which was an increase of 1,000,000 of red cells, and 16 per cent. of Hæmoglobin. His weight had increased considerably and he was able to walk about. Respiration had fallen to 34. He was scarcely to be recognized as the same child of four months previous.

Case XXIX.—M. K., aged 9 years, white, male. Admitted June, 1902. Physical condition fairly good; had diptheria four months ago; measles last year; otherwise healthy. He was growing rapidly. Mucous membranes anæmic. For the last two years has taken Pepto-Mangan (Gude) at regular intervals, when his condition would invariably improve. Blood analysis: Red cells, 4,678,594 per cmm.; white cells, 7,100 per cmm. Hæmoglobin, 72 per cent.—a moderate amount of simple anæmia. Treatment: Pepto-Mangan (Gude), dr. 3 j, t. i. d., given for four months.

September 20—Appearance constantly improving. Blood count: Red cells, 5,280,989 per cmm.; white cells, 6,400 per cmm. Hæmoglobin, 82 per cent.

Case XXIX.—J. D., aged 4 years, white, male. Admitted July 8, 1902. Patient had been suffering from Pott's disease for a year and at times had very acute pains. He was unable to walk any distance without crying out from pain, and held himself from the table or bed to relieve pain. Deformity is marked and tender; lesion extends from the seventh to the tenth dorsal vertebra. Physical condition poor; anæmic. Blood examination: Red cells, 3,979,888 per cmm.; white cells, 9,000 per cmm. Hæmoglobin 66 per cent. Patient was placed on a Bradford frame and kept in the fresh air daily, taking Pepto-Mangan (Gude), dr. 3 j, t. i. d.

September 20—Patient has improved very much. At first he objected to the frame, but now he cried when moved from his portable bed to be washed. He suffered no more pain. Deformity sligtly corrected; appearance much improved. Blood report: Red cells, 4,898,788 per cmm.; white cells, 7,800 per cmm. Hæmoglobin, 76 per cent.—showing increase of red corpuscles and hæmoglobin, and diminution of leukocytes.

Conclusion.—Out of the 32 cases, the hæmoglobin and red blood corpuscles increased in all except 5 cases. An analysis of these may be of interest. In two of them there was before treatment a high red cell and hæmoglobin percentage, followed by a diminution after exhibiting the Pepto-Mangan, but which was accompanied with great subjective improvement. Speculation seems to be justified here that there was a condition of blood concentration—diminution of the whole volume of blood—before the treatment was begun (Cases XIII. and XVII.). Case V. improved at first, but subsequent applications overwhelmed the little patient. The other two cases unimproved were a case of sarcoma and a case of syphilitic periostitis, the former dying with the progress of the disease, and the latter simply remaining unimproved.

On the other hand, there were three cases classed as hopeless that made a complete recovery.

Betul-Ol Versus Salicylate of Methol. (By Gus Foullon, of New York.)—While it would be absurd to contest the therapeutic value of the synthetical salicylate of methyl, yet it cannot be denied that actual experiment with the natural product derived from the "betula lenta" gives much better physiologic results, although even this may cause slight irritation of the skin.

Betul-ol is a compound methyl oleosalicylate containing menthol. It has many advantages over the artificial and natural methyl salicylate in treating the symptom pain arising from rheumatism, neuralgia, sciatica or in fact from any cause. It is very rapidly absorbed, affording almost instant relief without reddening the skin or producing irritation.

Its anodyne and antiseptic action takes place, moreover, even if the Betul-ol is not applied over the seat of the pain, because this salicylic compound, when taken up through the circulation, on coming in contact with any lesion, finds itself in the presence of an excess of carbonic acid which liberates salicylic acid at the spot. Hence direct antiseptic results are produced in the tissues followed by relief from pain. Effete cell tissue and pus are sterilized by free salicylic acid and its application is followed by slight diuresis and a marked increase of all solid constituents of the urine, especially urea and uric acid.

The counter irritant, penetrating power and local anesthetic properties of Betul-ol are indicated in all arthritic, neuralgic and myalgic affections, including arthritis from any cause, but particularly those affecting the superficial nerves, and any form of myalgias, which have always been counted among the most stubborn affections. It has been applied in the treatment of endometritis (apply by painting the cervix); it also relieves pruritus and lichen simple. Betul-ol in fact, is applicable wherever we look for local anti-rheumatic, anti-podagraic and antiseptic results.

Betul-ol is for external use only; but colchi-sal capsules internally, are essential to the treatment, where there is a mixed rheumatic and gouty tendency.

Quite small amounts of Betul-ol suffice to give relief, as each minim absorbed produces an equivalent of one grain of nascent salicylic acid.

Comparative Effects of Colchi-Sal and Other Modern Agents in Gout and Rheumatism (by C. A. Wilson-Prevost, M. D., of the Hospital of Paris).—No practitioner, however busy, can afford to ignore the more modern theories on the cause and treatment of gout and rheumatism. While many new synthetical agents claim merit on theoretical grounds, these claims are at best only partially proved, and we must still place most reliance on diet, saline purgatives, and capsules of colchi-sal; relieving acute symptoms by external applications of anodynes, such as betul-ol, which are easily absorbed cutaneously.

An article published in the *British Medical Journal* (31st Jan., 1903), entitled "Influence of Modern Drugs on Metabolism," by W. Bain M. D., of Harrogate, is well worth reading in detail. The author made comparative tests with a view of ascertaining the influence of several modern drugs on metabolism, and gives detailed tables of cases of chronic gout verified and controlled in a hospital by Drs. Barrs and

Telling. The results are most interesting and valuable for comparison, showing that which occurs in the urine, after exhibition of nthium benzoate, tartrate of piperidin, piperazin, lysidin, urotropin, sidonal, and colchi-sal capsules. The quantitive analytical tables show, not only what the excretions were during several days exhibition of the drugs but also before their exhibition.

These experiments confirmed the opinion of other observers, viz: that these drugs had no appreciable solvent properties on the uric acid secretions, already deposited in the tissues, on which the theoretical value of all except colchi-sal is based, but the author remarks that the administration of *colchi-sal capsules appeared to give the patient more relief than any of the other remedies.* When we remember also that Weisz's experiments go to show that there is in the blood itself, a normal uric acid solvent which prevents its precipitation, and that even the blood of gouty patients yields a scrum which dissolves from 10 to 40 times as much uric acid as water, we can hardly avoid the conclusion that colchi-sal either inhibits the formation of an excess of urates, or prevents their precipitation, by stimulating the natural uric solvent in the lood.

Dr. Colin Campbell, Southport, Eng., L. C. R. P., M. C. R. S., writes in the *Medical Press and Circular,* London, Eng., Oct. 7, 1903:

Pleurisy.—Dr. B. was under my care last winter, suffering from a pulmonary cavity. He had had previously two or three intercurrent attacks of pleurisy, which I again found present Dec. 7th, 1902, accompanied by severe pain over the cavity, and a temperature of 103 degrees. His previous attacks had occurred at his home, where careful poulticing was practicable, but in apartments this was unsatisfactory, and so it occurred to me to try Antiphlogistine.

The material was warmed and "trowelled" on for many inches around the pleuritic centre, then covered with non-absorbent lint and Jaconet.

The result was remarkable: the pain disappeared within an hour, and the high temperature within two days.

Many advantages over poulticing were noticed by the patient: facility of application, no unendurable heat, rapid relief from pain, its adhesiveness rendered movement possible without tight bandaging or the alternative sudden influx of cold air which follows the separation of a poultice from the skin.

Rheumatic Pain and Fever.—In *The Medical and Surgical Bulletin* we find the following, under the caption of "Acute Articular Rheumatism," by Dr. E. G. Evans: "Salol is the best intestinal antiseptic we have, and Antikamnia as a pain reliever is, without doubt unsurpassed, therefore the combination of these two remedies in the form of the well known 'Antikamnia and Salol Tablets' affords us the ideal medicament for pain and fever in rheumatic conditions. Patients appreciate the fact that when administering Antikamnia, you relieve the pain without giving them morphia, while the Salol acts as a germicide and antiseptic, tending to ameliorate generally, the symptoms of the disease. Antikamnia and Salol Tablets (each tablet contains 2½ grs. Antikamnia and 2½ grs. Salol) are best given in doses of two tablets every three hours until ten or twelve tablets are taken during the twenty-four hours. The patient's bowels must be kept open and the diet must be light. Alcohol is contra-indicated and water should be freely and frequently given. The

bed-covering should not be too heavy, but warm. Cold water packs, as well as hot fomentations, are very beneficial."

For Acne of the Face.—

R Betul-ol (Methyl-Ole-Salicylate Comp.) 1 gram
Ungt. Storax 1 gram
Lanoline (Anhydrous) 20 grams
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Apply every night with rfiction for ten days; then interrupt the treatment. Re-commence after ten days again, if necessary.

The H. K. Mulford Co. have recently published a Brochure on antitoxin, and one on vaccine, setting forth, in detail, many of the processes in the production of these life-saving agents. Their biologic and vaccine laboratories are located at Glenolden Farm, Pa., and are fitted with every instument and apparatus that scientific study has shown to be helpful.

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Every physician is liable to be called upon in the capacity of a public speaker on various occasions. For obvious reasons he is very desirous of making a good impression upon the people before whom he speaks. One who makes a profound impress upon the minds of an intelligent audience, controlling their thoughts and guiding them in the direction of his own, can never be entirely forgotten.

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A One Family Settlement.—How Indian Households Grow by Accretion.

"No one is a separate unit in India," says Edmund Russell in *Everybody's Magazine* for March. All marry—marriage with them is as life and death marriage with them is as birth and death, inevitable—and their children are added to the family. There are always widowed aunts, other grandparents—no relative is ever left to shift for himself in India—so that households of 150 are not uncommon. Add almost as many servants, and we have some idea of the occupants and cares of the mistress of such a home. The servants' quarters surround the yard or 'compound,' and the ladies of the household care for them as did the stately dames of old Virginia in the plantation life before the war. The great *zenana* court yards stretch back to fruit and vegetable gardens, and there are tanks or artificial ponds where the ladies and children bathe in seclusion. Blossoming trees rise above hedges that jealously guard these sacred retreats, where a family may sport in private with freedom unknown to us, and suited to their shy, poetic, playful natures, that only unfold when with each other; caring as little to see the world outside as to be seen by it."

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How to Study Literature.—A guide to the intensive study of literary masterpieces, by Benjamin A. Heydrick, A. B. (Harvard), Professor of English Literature, State Normal School, Millersville, Pa.

In revising his remarkably successful (eight editions in first ten months) book, "How to Study Literature," which was published about a year ago Professor Heydrick has added several valuable new features. But the one added feature which perhaps most the

already inestimable value of the work, is a list of recommended reading, which not only names the chief writers in English and American Literature, but also designates under each author the very books or selections which one should read who would get a fairly representative view of each writer. Perhaps we can best convey the splendid untility of this list of recommended reading by quoting Prof. Heydrick's own words introducing it:

"If the study of a piece of literature is pursued in the proper spirit, it will awaken in the student a desire for a further knowledge of the same author's works. If he goes to the library and takes down a complete edition of that author, he may open the book at some juvenile, or at something which is difficult in style, or is remote from his experience, and therefore uninteresting. He is disappointed, and perhaps fails to find the beauty or the inspiration that awaits, simply for want of proper direction. To give this direction is the aim of this *list of recommended reading*. It does not purport to be a complete list of the best books, nor to include all of the best of each author, but it does aim to give, for the chief writers in English and American literature, selections that are fairly representative of the author, and that are adapted to serve as an introduction to the author's work. To this end, every selection has been submitted to a twofold test: first, that it be a classic work; and second that it possess sufficient interest to make its reading not a task but a pleasure.

"It is hoped that the list will prove of service also to classes studying the history of English and American literature. It is generally agreed that such study should be accompanied by a generous amount of reading in the chief authors. Few text-books, however, indicate definitely just what should be read, and their references are apt to include a number of long works, entirely beyond the power of the student to cover. Care has been taken in preparing this list to require no more than the average student may be able to read."

This list of recommended reading, along with the lists elsewhere in the book, of the words to designate correctly any literary quality or characteristic one may wish to describe, *are alone worth possessing.*

A New Surgical Treatise on Diseases of the Prostrate Gland and Adnexa.—By George Whitefield Averall, A. B., M. D., formerly Prof. of Physiology, Memphis Hospital Medical College. Cloth, 207 pages, copiously illustrated. Published by Rowe Publishing Co., 1312 E. Washington St., Chicago, Ill.

We have carefully perused this work and have only the highest praise for it. The author's clear ideas of the etiology of the various disorders of the prostate, prostatic, seminal vesicles, etc., are well expressed. His methods of treatment, however, constitute the most important part of the work, and will encourage many practicians to take up this branch of practice again hopefully, and will lead them to more favorable results than they have ever known before. There are many victims of chronic prostatic disease who are needlessly going through the last few years of their lives in a crippled condition. Dr. Overall has done a good work to bring before the profession in concise book form the result of his many years of experience and untiring in this much-neglected field.

The motto of this little volume might

be stated as "Better bear the ills we have than fly to those we know not of." The author has devoted a quarter of a century to study and experimentation in electrolysis and cataphoresis in genitourinary work, and he deserves to be ranked as an authority in this field of therapy. While he does not limit the treatment of these cases to medicines and electricity, yet when taken in time these measures usually suffice, as shown by his clinical successes. Full and clear directions are given for diagnosis and treatment, and the appendix, on the principles of electrophysics, contains much useful information. The text is illustrated with 26 figures. The book will bear a careful perusal by all who are interested in conservative methods.

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Here, too sound the familiar voices of George William Curtis, Lowell, Blaine, Phillips Brooks, Beecher, Garfield, Disraeli, Bryant, Grand and Choate. Poets also — Lognfellow, Holmes, Tennyson, Byron, Whittier, Schiller, Shelley, Hood, and others.

More than a hundred other authors besides! We have not space to enumerate. But the selections from them are all just the thing. And all the selections are brief.

Like the companion volume, College Girl's Readings, this work contains many "pieces" suitable both for girls and boys, and the two books may well stand side by side upon the shelf of every student and every teacher, ever ready with some selection that is sure to please, and exactly suited to the speaker and to the occasion.

Hinds & Noble, 31-33-35 West 15th street, New York City.
York City.

A Text-Book on Letter-Writing.—Cloth, 75 cents Postpaid; 165 Pages.

The following table of contents will give the reader a fair idea of the scope of this book, and its value to most all people, including doctors:

Part I.—Letters Notes and Postal Cards: Structure of Letters, Social, Domestic, Introductory; Business, Personal, Official; Miscellaneous, Public, or Open. Postal Cards.

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Part II.—Orthography and Punctuation: Rules for Forming Derivatives,

etc.; For Capitals; For Punctuation; Special Rules.

Part III.—Miscellaneous: Classified Abbreviations; Foreign Words, Phrases; Postal Information. Hinds & Noble, Publishers, 4-5-14-13 Cooper Institute, New York City.

THE CHRISTIAN SCIENCE DELUSION.—By Rev. A. C. Dixon, D. D.

This is a small book or pamphlet, consisting of three sermons, delivered by the author and published by Wm. H Smith, 25 Stanhope street, Boston, at ten cents a copy.

While the point is considered largely from the point of a theologian, its evils in other respects, and especially in its bearing upon the physical condition of man, and the relief of disease are shown in no uncertain manner. It is a masterly presentation of the subject, and is well worth the small price asked for it, and we cordially recommend it for a study of this phase of the question.

THE PANAMA CANAL AND THE INDUSTRIAL PROGRESS OF THE SOUTH.

"Throughout American history, the exports from the Southern States, the cotton, tobacco and naval stores have constituted a large part of the tonnage of our foreign commerce; and recently phosphate, coal, iron and steel, and general manufactures have made an important addition to the outbound trade of that section," says Emory R. Johnson in *Everybody's Magazine* for February. "The products of the South find their foreign markets mainly in Europe, but they are increasingly in demand in Pacific countries from which they are largely excluded by costs of transportation. The canal will give the cotton industries of the South a more profitable trade in the Japanese market, where there is a keen competition with cotton from East India and China. The new waterway will also aid in the exportation of cotton manufactures to western South America, Asia, Oceania, where Great Britain and Germany now control the trade. The effect which the canal will have on the iron and steel industries of the South is illustrated by a statement made by one of the largest firms in Birmingham, Ala.: 'The opening of the Isthmian Canal would be of incalculable benefit to us in increasing our facilities for export business, and would warrant the development of our southern property to the fulllest extent.'

"The canal will open up a large market for Southern coal, lumber, naval stores, and phosphate. The coal will be required by the vessels using the canal, and in the coaling stations of the eastern part of the Pacific Ocean in tropical and south temperate latitudes, and also for industrial purposes along west coast of Central and South America."

PHYSICIAN'S POCKET ACCOUNT BOOK.—By J. A. Taylor, M. D. Published by the *The Medical Council,"* Philadelphia, Pa. Bound in leather, with pocket and tuck. Size $4\frac{1}{2}$x$6\frac{3}{4}$ inches. 200 pages. $1.00.

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A number of valuable suggestions are given as to the best ways to make collections, etc. For the busy practitioner, this book offers many advantages—saving much time in transferring accounts from visiting lists to ledgers.

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Who's Who in History ?

Embarrassing, isn't it, when we run across the name of some god or goddess, in the daily paper, or in a poem, *not to know?* Or perhaps one just fails to enjoy *perfectly* a beautiful painting or engraving or piece of statuary, because ignorant of the *myth* implied, or, may-be, one misses the point of some classical allusion in a speech, a lecture, a sermon, or at the play.

And how one's memory in *piqued* when one can't recall the story, though once familiar! How the matter "sticks in the mind," pestering us until it all comes back to us; and *then* we're annoyed to think we couldn't recall the connection on the instant, and we wish there were some way to be saved all the pother.

Well, there *is* a way!

Just have at hand a convenient little book that gives the name of every god and goddess, or hero whose name is ever likely to be broached. Not a *tome,* with encyclopædic fullness of description! No! But just an alphabetical list, as it were, for ready reference, enabling one to find and locate the personage *instanter;* and quite enough description to enable one to connect with the *story*—just enough to rescue one from seeming so distressingly *ignorant,* as if one had never even heard of Pallas, or Aphrodite, or Thalia, or Ariadne. Can *you* tell as many, say, as *four* different but quite familiar names of Minerva? How about Diogenes' tub and his sunshine? Xanthippe?

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MEDICAL NEWS AND ITEMS.

Dr. J. P. Matheson, of Taylorsville, has located at Belwood.

Dr. J. M. Duguid, or Newbern, has removed to Charlotte, N. C.

Cholera is reported as being epidemic in Kerbela, south of Bagdad.

The University of Pennsylvania has just completed a new medical laboratory, at a cost of $500,000.

In New York City the number of deaths from pneumonia during 1903 was 9,260, being 13 per cent. of the total mortality.

Bertrand has found arsenic in appreciable amounts in all parts of the hen's egg, thus confirming the new belief that arsenic serves a special function in all living cells.

Dr. C. M. Poole, of Craven, chairman of the committee on obituaries, requests that any one knowing of the death of any member of the society will please report the same to him at once.

A New "Pathy."—J. B. Brown, a self-styled "cereopathic physician," has been committed to prison by Coroner Dugan. Brown had been treating a child, celery tea being a principle remedy. At the coroner's inquest on the death of the child, it appeared that Brown had no legal right to practice medicine.—Exchange.

E. B. Treat & Co. announce the consolidation of the *International Medical Magazine* with *Archives of Pedatrics,* the publication of the former journal being discontinued. Dr. Bordman Reed made a most excellent journal of the *International Medical Magazine,* and we shall miss its monthly visits very much, as it was one of our most valued exchanges.

Ontario Teachers to be Trained in Hygiene.—A medical conference was held last week in Toronto, as the first step in an investigation of school hygiene by the Ontario Board of Health. One result of the conference may be a medical section in conection with the annual conference of the Ontario Teachers' Association. Papers were read on the prevention of infectious diseases, and Dr. C. A. Hodgetts, secretary of the Ontario Board of Health, advocated complsory drill for school boys, as a basis for men trained for the militia.

Osteopath Fined for not Reporting Diphtheria.—Joseph A. Vance, president of the Ohio College of Osteopathy, Chillicothe, Ohio, was fined $20 and costs, February 2, for failing to report a case of diphtheria to the proper health officials.

The brain of the Japanese grows more slowly during infancy and early youth than it does in the European. In the adult the brain weight compares favorably with that of the European of similar stature, and it may be shown to be superior in this respect to other races of the same general stature. These facts are not a little significance in relation to the learning, industry, and aptitudes of this progressive race.

Expectoration on the Sidewalks.—The members of the Chicago Progressive Health Club are urging the wide publicity of the anti-expectoration ordinance, aided by the press and printed cards. An anti-expectoration ordinance was passed by the city council three years ago, but has never been enforced.

Recently, however, Alderman Coldzier drafted a memorial for presentation to the city council to the effect that the police and health departments shall be instructed to cause the arrest of persons who flagrantly and offensively violate the ordinance by spitting on sidewalks, etc.

Local Anesthesia—

An editorial in *American Medicine* for November 7, calls attention to the danger in the combined use for surgical anesthesia of morphin and scopolamin (hyoscin). This method is known as the Schneiderlin-Korff narcosis. Kochman has found two deaths in 235 cases in which this method was employed, besides a large number presenting dangerous symptoms. The method is founded upon ignorance of the physiologic action of the two drugs, the originators stating that they are antgonistic in their action save upon the brain. As a matter of fact, while antgonistic in their action upon the pupil, and to some extent upon the heart, there is hardly an organ in the body on which their effects are entirely antagonistic, while both of them are marked depresants of the respiration, of the peristaltic movement of the bowel and of secretory activity. As the method is being copied into some of the American journals, attention is thus called to it warning against its use.

It is reported that a Pennsylvania doctor burnt up, as worthless, $42,000 in accounts. What other business man would allow that amount to stand in accounts until they were "no good?" Moral: Collect closely; if you can't get cash, take a pig, a cow, or a horse, or a load of wood or of corn—something that you can sell or use. If you can't do that put your accounts in the form of notes—notes draw interest, and they are a better form of obligation than accounts. Accounts may be disputed; and that is the more likely, the older the account is. And while collecting obligations from others, don't forget *your* obligations to others.—*Medical World.*

The Right to Protect One's Name.—Dr. Fred. C. Valentine, of New York, has recently been greatly annoyed by the action of a manufacturing company which made and sold an alleged remedy for gonorrhœa under his name, though with other initials. Neither of the incorporators of the company nor anyone connected with it, so far as known, has that name. Dr. Valentine, through his counsel, called upon the company to desist from the name of Valentine, and upon their refusal caused a petition for an injunction against their so doing to be prepared for filing in the Circuit Court of the United States. On January 20, however, the counsel of the company had an interview with his legal adviser, which resulted in the former unequivocally advising his clients to cease using the word Valentine in any manner whatever. In an address to the medical profession, Dr. Valentine asks that he be informed in case of any disregard of this advice, in order that he may take steps to uphold his rights.

Peculiar situation at Hospital.—A peculiar situation of affairs exists at the Cincinnati Hospital. The annual appropriation has been so small and the number of patients so large that gradually the hospital has been getting deeper into debt, until now it owes about $30,000. The hospital now contains 120 more patients than it really has room for, and they are sleeping in the end-

Continued on page 216

The Clinical Application of Ingluvin

Ingluvin is the name given to a preparation made from the gizzard of the domestic fowl. Since its introduction, no remedy of modern times has attracted more attention among physicians far and near nor received higher endorsement than Ingluvin, which is now supplied throughout the world. The product occurs in the form of a soft powder of a yellowish-gray color and a faint odor. It is almost devoid of taste. A slightly bitter after-taste is left, but this soon disappears. Ingluvin is insoluble in water and the usual menstrua. It can be administered, stirred into water or milk, or in tea, coffee, chocolate, wine, etc., if no therapeutical objection exists. Its feeble taste is easily disguised. Ingluvin is also put up by its manufacturers (Messrs. William R. Warner & Co.) in convenient 5 grain tablets. The dose of Ingluvin is from 5 to 20 grains. Spread upon bread and butter it may be conveniently administered to children. Ingluvin possesses the advantage of being compatible with alkalies.

As the gizzard contains no peptic glands, the undoubted efficacy of Ingluvin cannot depend upon the presence of a digestive ferment analogous to pepsin. It has been ascertained that its virtues reside in a peculiar bitter principle which enters into its composition. It is prescribed in the same manner, doses, and combinations as pepsin.

Ingluvin is prescribed in the vomiting of Pregnancy, Dyspepsia from Uterine Disease, Colic, vomiting caused by Alcoholism, and other digestive derangements. It is likewise beneficial in dyspepsia when produced by functional inactivity. It will promptly check the diarrhœa which is caused by indigestion. By reason of its influence upon the stomach and bowels, Ingluvin is capable of marked service in cases of cholera infantum and cholera morbus.

The evidence in favor of Ingluvin in all cases of gastric disturbance is overwhelmingly convincing as to its superior efficacy over pepsin, and its use should never be neglected in any case of gastric irritability, no matter what may be the cause.

From the preceding abridged account it will be seen that Ingluvin possesses an exceedingly important sphere of usefulness. Disorders of the alimentary canal exert such a widespread influence, they are so often linked with profound general disturbances, and they are so distressing in themselves, that any remedy which demonstrates its efficacy in regard to those affections should be warmly welcomed.

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For soft corns that appear between the toes, apply salicylic acid on absorbant cotton.

Do not cut or pare hard corns. The common sense method is to remove them with medium sandpaper. Rub carefully and the surface will be left smooth and soft.

Try this plan and tell your patients to try it, and they will be gratetul for the advice.

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Medicine is a progressive art, and is becoming more scientific. Cases of symptoms and diseases are now known, and the attempts made at their eradication is a chief principle in treatment. Manual or mechanical aids are being used with increasing frequency and satisfaction. The local application of drugs is used much more frequently, instead of soaking the whole body to get the effect on some special part. Instead of huge doses of crude drugs, the alkaloids or active principles are being used, so that one can now medicate with as much skill and as definitely as he can use the knife, stopping short at the physiologic effect or increasing or decreasing the effect as he wills.—*Iowa Medical Journal.*

Edward Martin and M. E. Pennington report cases in which the effect of adrenalin seemed to be life saving. Laboratory experiments apparently show that adrenalin by intravenous injection is the most powerful, practicable cardiac and vasomotor stimulant yet presented to the profession. It also stimulates the respiratory center and increase general metabolism and body temperature. The toxic dose for man is not known. The dilution should be at least 1-10,000 when the drug is given hypodermically. It seems safe to give an initial dose of 10 c.c. of the strong solution in 90 c.c. of normal salt. The injection should be slow, thus prolonging the effect of the drug.

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Continued from page 212.

rooms, and wherever an additional cot can be squeezed in. The reason of this overcrowding is the measles and typhoid epidemics, and to this fact the attention of the board of public service has recently been called. According to the law, the $50,000 bond issue asked for can be allowed only by an election, which would cost the city $20,000, or it must be shown that there is some extraordinary need, as, for instance, an epidemic. The medical directors of the Cincinnati Hospital then reported to the board of public service that there is an epidemic, both of measles and typhoid fever in the city. Following this advice the board immediately authorized a $50,000 bond issue for emergency hospital purposes. Before the bonds can be issued, however, the ruling must pass the council, but no difficulty is anticipated here, as press and public are heartily in favor of the movement.

On December 14, 1903, Dr. Frank B. Mallory, assistant professor of pathology at Harvard Medical College, read a paper in that institution in which he reported the discovery of what he believes to be the germ of scarlet fever. He stated that in the skin of four patients affected by scarlet fever, and died in the eruptive stage, he had found a series of bodies which closely resembled the various development stages of protozoon. Thus it appears that in its etiology the disease bears close relationship to malaria and other diseases caused by the protozoa. The bodies found in scarlet fever resemble the different stages of the sexual development of the malarial organisms, but do not live in the blood; instead they live in the epithelial cells of the skin and tongue, between these cells, and in the superficial lymph vessels and space of

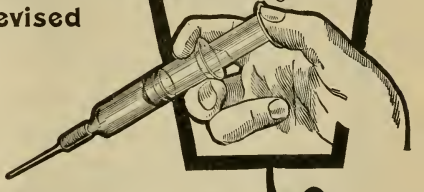
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[Excerpt from 1902 Report]

We have had during the year (ending Dec. 31, 1902) 170 cases of diphtheria with two deaths; these being in a moribund condition when brought in the hospital. Such results have been obtained by a very liberal use of Antitoxin.

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the corium. Like the malarial parasites, they multiply by forming segmenting bodies of rosets. These rosets are about one-third larger than the malarial rosets and the number of segments would seem to be about twice as many. Whether or not sexual development occurs, as with the malarial micro-organisms could not be determined.—*American Medicine.*

Officers Elect of the Tri-State Medical Association.—The meeting at Danville on February 23-24, was of unusual interest. Many able papers were presented and discussed. The Danville Academy of Medicine gave the visiting physicians an enjoyable banquet. The officers elected are: President, Dr. W. L. Robinson, Danville, Va.; vice presidnets, Dr. Southgate Leigh, Norfolk, Va., Dr. H. A. Royster, Raleigh, N. C.; Dr. Defoix Wilson, Spartanburg, S. C.; secretary and treasurer, Dr. R. E. Hughes, Laurens, S. C. Greensboro, N. C., was chosen as the meeting point for 1905, and the date will be in February.

A literary man, who has just returned from the anthracite coal region of Pennsylvania, says that he found a great quantity of "local color" there. He also says he heard the most ungrammatical sentence, while there, that ever came under his notice. He was strolling through a mining village in Schuykill County, when he heard a woman calling, and at some distance off saw several children who were playing in the road. When he reached them he said kindly:

"Your mother is calling you, children."

The largest child, a girl of about ten years, turned to him and said:

"Her ain't a-callin' we; us don't belong to she."—*New York Times.*



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The Reading Railway Company's Crusade Against Smallpox.—The Philadelphia and Reading Railway Company has put itself on record as an admirable assistant to the Philadelphia health authorities for the prevention and eradication of smallpox. An order which the company has recently issued reads in part as follows: "Passenger trains conductors, agents, and other employees should watch carefully for persons on trains and about stations who have a suspicious eruption on the face, and when any such are noticed, notify at once the superintendent's office, also the medical examiner, if he is within reach. If the medical examiner is not in reach, a reputable physician of the town should be called to make an investigation. The car in which a case of smallpox is discovered should at once be locked; then names and addresses of other persons in the car should be taken, in order that the health authorities in their respective places of destination can be at once notified, in order that they may be kept under observation for two weeks; all unvaccinated persons should be vaccinated if the means are at hand; the car must be sidetracked as soon as possible and the other passengers allowed to proceed, but the patient and his luggage detained until proper refuge can be found for him through the health authorities of the nearest city or town. The car must then be disinfected. All employees should be vaccinated, and, in addition, any empolyee exposed to this disease, for his own personal protection, and in order to prevent the spreading of the disease, must be guided by such instructions as may be given by our medical examiners. In places where the disease prevails epidemically, no passenger should be taken on the train without a certificate from the health officials or other authorities, that they have not been exposed to the contagion."—*N. Y. and Phil. Med. Jour.*

SURGICAL HINTS.

The bougie a boule is by far the most valuable instrument we possess in the investigation of stricture, but it is well to remember that a solid sound can often be passed of a larger calibre than the bougie ,

Every wound in which the bones of the skull are affected is a compound fracture, as far as its dangers are concerned, and must be treated with the same extreme carefulness as compound fractures elsewhere.

In cellulitis of the scalp long incisions are preferable to short ones. It is well to recognize that the condition is a dangerous one, and that the true extent of the trouble can hardly be determined without a thorough shaving of the scalp, which should at any rate precede any incisions made in this region.

If you have on none but old plaster of paris for your dressings you can render it effective once more by placing it over the fire for half an hour in an iron pan.

The most valuable possession of a modern surgeon is a refined and accurate tactile sense. The great majority of patients are only too glad to submit to a thorough examination, and the latter, done as a routine measure in all surgical cases, is not only often productive of unsuspected information, but is of the greatest educational value to him who recognizes that skill with the knife should be only a small part of his attainments.

In no region is it so necessary to see that the wound is free from blood as about the scalp and skull. Blood clots formed there are very liable to decompose and form a soil for infection, often resulting in dangerous phlebitis. Hence an oozing wound of these parts should never be sewed up without drainage, and the best plan is often to insert sutures that are only made fast after a few days' treatment under an absorbent aseptic dressing.

In allaccidents and traumatisms, it is well to inquire at once into the existence of any diathesis. An investigation revealing a previous condition of diabetes, syphilis or tuberculosis, or of renal, gouty or rheumatismal disturbances, greatly affects both treatment and prognosis. If we await the time when such manifestations become manifest before we discover their possibility we waste precious hours.

Surgical dressings should always be changed at once whenever secretion reaches the edges of the dressing or comes out through any part of it, or whenever the patient shows a rise of temperature, after twenty-four hours have elapsed since the operation.

None of the antiseptic powders used for wound dressings can be considered as being really effective germicides. Their action is merely to lessen secretion, decompose ptomaines and stimulate leucocytosis. Notwithstanding its many drawbacks, there are some cases in which iodoform still proves the most effective.

One occasionally sees a fracture of the skull in which, after the lapse of a week or ten days the patient has so far recovered that he is inclined to get out of bed and pursue his ordiary occupation. This should be resisted, for it is never safe to allow these patients to stay in bed less than three or four weeks

With practice, any one easily learn to pass a female catheter without uncovering the patient. But it very rarely advisable to adopt this mode of action for the simple reason that it is not clean. Expose the patient, wipe the parts with a disinfecting solution, and insert the sterilized catheter without letting it come in contact with any part of the pudenda other than the urethral opening.

If the patient can lie comfortably on one side, see that his bed is so turned that his face will be directed toward the window. Otherwise he will be distressed by his unconscious tendency to turn towards the light.

In gunshot wounds in which the kidney has probably been injured or perforated, it will be wise to do a laparotomy for the reason that other important abdominal organs are likely to have been injured. The kidney itself will have to be attended to through the usual incision, as a rule.—*International Journal of Surgery.*

The July number of the *International Journal of Surgery* contains the following surgical hints:

A good blunt retractor can be made by bending over the handle of a spoon. For a sharp retractor bend the tines of a fork at right angles.

In the case of an intoxicated person who has received a severe injury, it is always best to empty the stomach at once by means of the stomach tube and funnel.

It is never wise to anesthetize a patient in the presence of many people. It renders them more agitated and nervous. It is preferable to anesthetize in an adjoining room, or to cause all but the anesthetist and one assistant to leave the room until the patient is thoroughly under the influence of the anesthetic.

In every severe injury of the hand or fingers perfect rest is desirable, and it is always of advantage to place the hand on a splint, so that the patient will be unable to use the fingers.

Never give an emetic to cause the expulsion of foreign body unless it is known that the latter is of such a size and form that it can easily repass through the esophagus.

Complications and Sequelae of Prostatectomy.—Dr. J. E. Moore, of Minneapolis stated that no single operator had sufficient experience to enable him to speak authoritatively upon the subject, and such extremes of experience had been reported that it was difficult to estimate the real dangers and difficulties of prostatectomy. It was altogether too grave an operation to be resorted to as a routine treatment for enlarged prostate, and was only applicable to properly selected cases. There would always be a place for palliative measures in neglected cases of prostatic enlargement. The most frequent cause of death following this operation was uræmia, consequently the most important preliminary ex-

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aminations were those of the kidneys. The next greatest danger was sepsis, and in the presence of an infected bladder it was an ever-present one. The most positive indication for operation was very often a complicating cystitis, and it was for the relief of this complication that the various palliative measures were most frequently employed. The only satisfactory treatment for this complication was drainage, and this was best brought about by perineal prostatectomy. Stone was a frequent complication of enlarged prostate, and should always be sought for and removed during the operation. The incision for a prostatectomy, when too extensive, caused various complications. Hemorrhage was an occasional complication, but its dangers had doubtless been overestimated. A serious objection to the supra-public operation was the extensive injury done to the bladder; while the most difficult problem connected with the perineal operation was how to avoid injury to the rectum. As sequelæ of prostatectomy, he mentioned impotence and incontinence or dribbling. A communication between the urethra and the rectum was one of the sequels met with occasionally. Epididymitis was quite a common sequel of prostatectomy, sometimes becoming so troublesome as to require the removal of the epididymis. Because the writer had dwelt briefly upon possible, as well as probable,, complications and sequelæ of prostatectomy, he did not wish to be classified as a pessimist. Some failures were bound to follow this important operation, as they did every operation of like magnitude. But notwithstanding this fact, it was destined to be one of the greatest boons modern surgery had to offer suffering mankind.—*Medical Record.*

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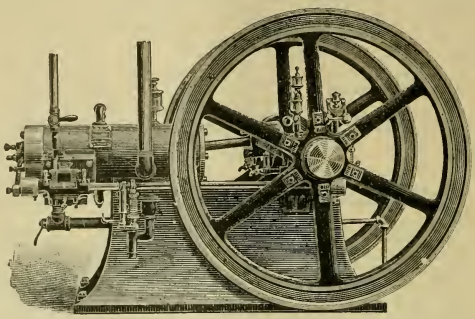
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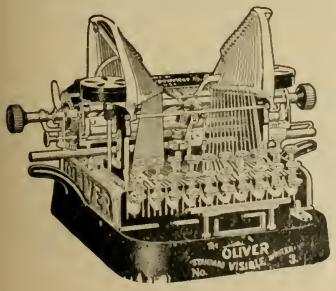
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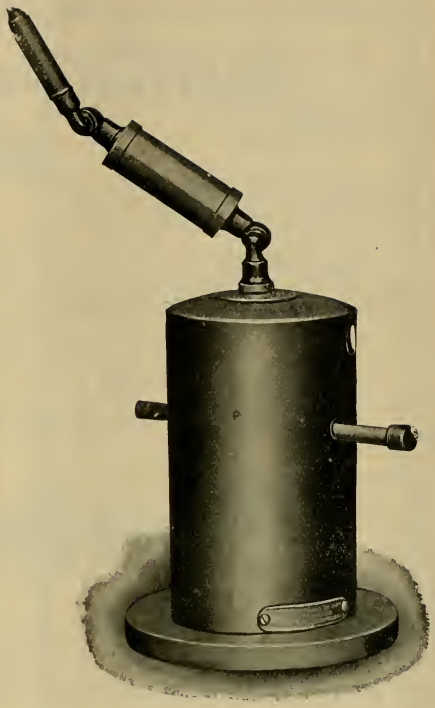
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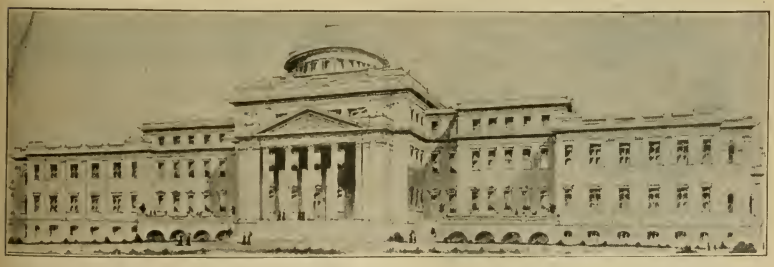
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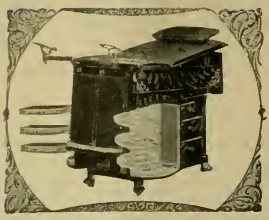


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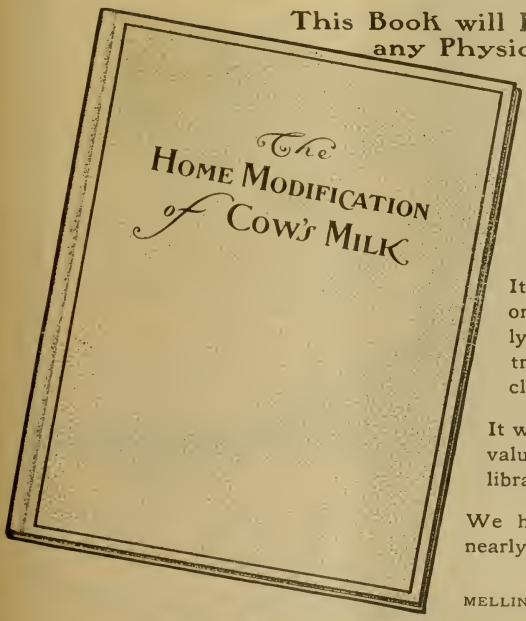
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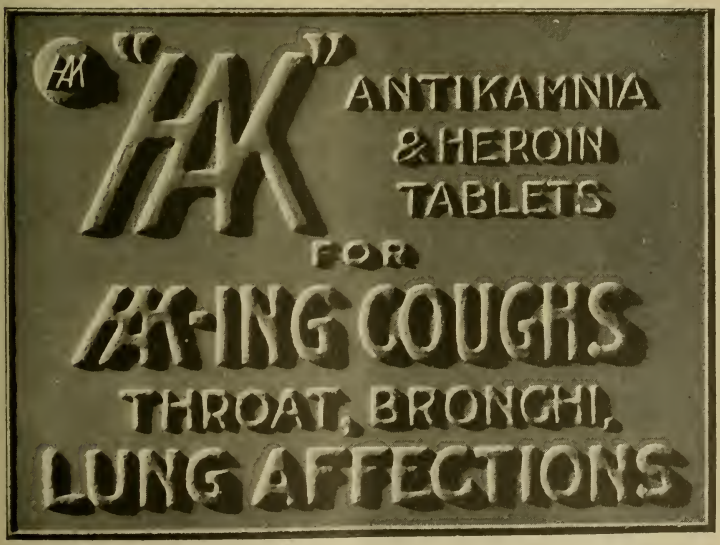
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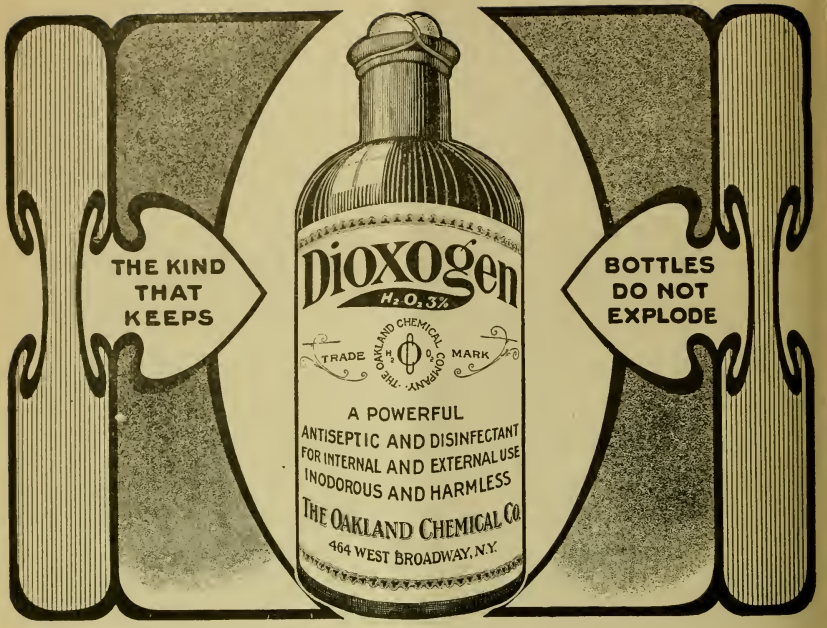
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ORIGINAL COMMUNICATIONS.

Abdominal Operations During Pregnancy With Report of Five Cases.*

By H. A. Royster, A. B., M. D., Professor of Gynecology. University of North Carolina Medical Department; Gynecologist to Rex Hospital; Surgeon in charge, St. Agnes Hospital.

Surgical interference in the gestation period is to be considered as a question of necessity and not of complacence. No woman in this condition should be submitted to an operation unless absolutely called for, either by suffering which cannot be relieved in any other way or by danger which threatens life. For a stronger reason these statements may apply to operations within the abdominal cavity. There has been, however, and there still exists, a tendency to magnify the risk of operating in such cases, both as to mortality and the interruption of pregnancy. As a matter of fact, the death rate is no higher under these circumstances than that for the same operations performed in the non-pregnant patient; and the number of abortions occurring on account of this interference is very small. The greater disaster comes rather from withholding surgical aid, when it is really demanded, simply because a woman is "with child," until the affair is a matter of life and death. So far from being a contraindication, the pregnant state furnishes in itself an additional reason for operating, if the need for it is present. Furthermore, when the condition can be relieved without cutting short the gestation it becomes an important matter to make an early diagnosis and apply the proper treatment. The only possible exception to this is that during the first few weeks of pregnancy miscarriage is more apt to occur as the result of a surgical operation than it is later and that unless the symptoms are urgent it were better to wait until this unstable period is passed.

Some of the conditions calling for the opening of the abdominal cavity during pregnancy are: neoplasms of the uterus, as fibroids and cancer; of

*Read at the meeting of the Tri-State Medical Association of the Carolinas and Virginia, Danville, Va., Feb. 23, 1904.

the adnexa, as ovarian cysts; lesions of the bowel, as appendicitis or intestinal obstruction; of the abnominal organs, as gall stone, or the rarer growths affecting the liver, pancreas and spleen. I shall not attempt an exhaustive review of the literature covering all these subjects, but shall confine my attention solely to those occurring in my own experience. Reports of five cases will be included as forming the basis for this paper.

I. Fibroids and Pregnancy.--Sterility is the rule with a fibroid uterus and, even if conception should occur, premature expulsion is apt to be the result. This complication, therefore, is an unusual one. Nevertheless, many cases have been reported by such men as Skene, Rosenwasser, Doleris. Hofmeier, Wells, McMurtry, Frank, Long, Coe, Carstens, and others, within the past few years. Between 1890 and 1900, there were 31 total abdominal hysterectomies with one death, a mortality of 3 per cent. Without going fully into a consideration of the points involved in operating on these cases, it is enough to say that opinions differ still as to the influence exerted by fibroids on the course of pregnancy. In 1891 Wratch stated: "Scarcely one-fifth of all cases complicated by fibroids terminate without surgical interference and about one-third of the mothers and one-half of the children die soon after delivery in consequence of the morbid growths. Operations during early pregnancy give better results than those undertaken later." Halliday Croom, in 1892, considered that they very rarely required surgical interference. Rosenberg (1896) thought that they had, with few exceptions, better be let alone till the beginning of labor. Skene regarded a fibroid as a grave complication of pregnancy and of especial moment in causing postpartum hemorrhage. On the other hand, Hofmeier, who denies the agency of fibroids in producing sterility, believes that myomata exert a benign influence on the course of gestation, and that operative interference should be condemned save in exceptional cases.

All of these apparently conflicting statements can be reconciled by having regard to the size and the variety of the tumor. In the first place, pregnancy may excite abnormal activity in growths which were previously quiescent or not troublesome (Currier). So that, fibroids seen in the early months will presumably become larger as the uterus grows. In the prognosis, then, we are to compute approximately the size of the tumor at term. Again, it will make a considerable difference whether the growth is interstitial or subperitoneal. The latter need not concern us except it be very large or low down. I have observed a woman through two pregnancies and labors with a pedunculated fibroid the size of a large grapefruit, which gave no trouble, beyond an increased amount of blood lost and a slowly contracting uterus after parturition. In these cases, if the tumor is extensive and has a long pedicle, myomectomy may be done, permitting the patient to go on to a normal delivery.

In the intramural form the rapidity of growth is marked and by pressure certain disagreeable symptoms are soon produced. Frank (*British Gynecological Journal,* Nov. 1903) has well summed up the indications for operating during pregnancy: (1) "If the tumor is growing rapidly; (2) if the circulation and breathing are disturbed; (3) if there is reason to suppose that the myomata may lead to a premature interruption of the pregnancy; (4) if

symptoms of peritonitis or incarceration appear, due to the tumor." To this we may add Keiffer's suggestion that interference is demanded when, independently of pregnancy, the fibroid tumor would make hysterectomy justifiable. With the rules laid down by these observers I entirely agree and the two cases which I have had illustrate the soundness of such views.

Case A.—Fibroma of the Uterus Complicating Pregnancy; Total Hysterectomy at the third Month; Recovery.—A. S., colored, age 28, married seven years; no children, no miscarriages. Her menses began at thirteen years and were always regular, painful and free, but with no flooding spells. About a year ago first noticed that her abdomen was somewhat fuller and since then has been distinctly aware of a growing mass. She menstruated last during the first week of January, 1901, having missed about three months up to her admission to St. Agnes' Hospital, on April 6, 1901. he has had no nausea, but has some enlargement of her breasts. The symtoms complained of were a feeling of constant pressure in the abdomen and dyspnea, especially on exertion, increasing in the last month. *Examination*: A large, hard nodular growth in the abdomen, extending up to the diaphragm; the upper portion seems to be movable independently of the lower, and is larger, being much beyond the size of a fetal head; below there is a mass which entirely fills the pelvis; cervix softer than is usual for a fibromatous uterus and the os is slightly patulous. *Operation:* April 17, 1901. Panhysterectomy. Seven inch abdominal incision, tumor delivered easily, no adhesions. The vessels on the left side were tied first and the upper vagina cut through; then the right side was treated in the same way from below upward. The peritoneal flaps were brought together accurately, so that no raw surface was left in the pelvis. The woman made an uneventful recovery.



FIG. 1.

The tumor (Fig. 1) when removed, was seen to consist of the three distinct portions, a larger mass in the upper part, the uterus proper in the middle and a smaller mass below. On opening the uterus a fetus of approximately three months' growth was discovered. The whole womb was riddled with interstitial fibroids. Weight of specimen, 12 lbs.

Case B.—Uterine Fibroid Complicating Pregnancy; Supravaginal Amputation at the Sixth Month; Recovery.—Mrs. W., age 36, married seven months. There was nothing of consequence in her previous history except that she for some years had slight dysmenorrhea. Since the first month after marriage she had missed her menses and did not

notice anything unusual, except the rather marked enlargement, till some weeks previous to her admission, when she had called Dr. A. T. Cotten. She was then suffering from constant abdominal pain, difficulty in walking, and dyspnea, so that she could not lie down at night. Examination disclosed a pregnant uterus containing fibrous nodules with a larger, denser mass occupying a higher position to the left. The diagnosis was much more easily made than in the previous case. On Sept. 21, 1903, the abdomen was opened and a supravaginal hysterectomy performed after the ordinary fashion. The woman made a splendid recovery and has remained well. The pathology of the growth (Fig. 2) was interesting from the fact that telangiectatic changes had set in—a most dangerous type of degeneration.



FIG. 2.

It would have been the height of imprudence to allow these women to advance further in their pregnancies, much less to hope for their safe deliveries at term. The induction of abortion and a subsequent hysterectomy would, also, have subjected them to greater peril. One could hardly prefer a Cesarean section or removal of the uterus during labor to an operation performed earlier, if the choice of either were given. Of course, no account is taken here of the fetal mortality, as this, in my estimation, must always be secondary to the safety of the mother. A number of remarkable cases are on record. Notable among them is one reported by Jepson, in which a triplet pregnancy, complicated by multiple uterine fibroids was treated successfully by hysterectomy at the third month.

II. Ovarian Cysts.—In contrast to the uncertain tone expressed by the authorities on the question of fibroids complicating pregnancy, there seems to be but one opinion concerning the management of ovarian cysts associated with that state. All agree that they should be removed when detected and that an ovariotomy executed in the early months has the same low mortality as if pregnancy did not exist. The complication, however, is always a serious one in view of its possible dangers. Very seldom is the presence of a

cyst determined until one of two specific events occurs, viz., torsion of the pedicle or obstruction during labor. The latter is readily recognized at the time; the former gives rise to symptoms unmistakable,—abdominal pain and distention, vomiting and elevation of temperature, with, finally, suppuration and gangrene of the cyst and peritonitis, if not removed in time. The first thought, when such phenomena appear in the pregnant woman, should be the twisted pedicle of an ovarian cyst.

My records show a single typical instance which I shall briefly present. It was recited under another subject at the last meeting of this Association.

Case.—*Ovarian Cyst with Torsion of the Pedicle (involving the appendix) Complicating a Six Months' Pregnancy; Ovariotomy; Appendectomy; Recovery.*

Mrs. E. L., age 38, was first seen by me at her home in another town. She was advanced six months in her seventh pregnancy and had "never felt right" during the entire gestation period. Her physician, who kindly referred her to me, had detected an abnormal growth in the abdomen a month or two before. Four days previous to my visit the patient was suddenly seized with vomiting, pain and fever; followed by a gradually increasing distention of the abdomen. On examination the temperature was 101 and the pulse 120; the abdomen presented diffuse tenderness and rigidity and, besides the pregnant womb, nothing could be made out beyond a vague enlargement in the epigastrium. The most probable diagnosis was thought of, viz., ovarian cyst with torsion of the pedicle. The patient was brought to Rex Hospital the next day and prepared for immediate operation. The abdomen was opened in the median line and a large ovarian cyst recognized at once. Tracing it downward, its pedicle was found to be twisted four times to the right, while the appendix was plastered firmly around it, being involved in the torsion. These turns were quickly pulled apart, the cyst pedicle ligated and the appendix taken away. A prompt and perfect recovery was the immediate result; an easy birth at term was the sequel. The baby had inanition and lived but a few days. The cyst was severely strangulated, its contents being a dark chocolate-colored material and its walls containing minute hemorrhagic points with beginning sloughs. The appendix was infected within and inflamed without.

III. Appendicitis.—There is no reason to believe that pregnancy stands in any causal relation to inflammation of the appendix, their simaltaneous occurrence being merely a coincidence. But, according to Boullier, appendicitis has a definite influence on pregnancy. He calls attention to seven abortions about the fourth month in twenty-two cases, regardless of whether the treatment was surgical or expectant and thinks that the prognosis of appendicitis in this event is more serious. At any rate, the conduct of such cases is just the management of the appendicitis, the pregnancy not being considered or, if it is, to feel that it offers even a stronger indication for immediate, early intervention. If the percentage of deaths is higher, it is usually because operation is delayed unduly beyond the proper period owing to an exaggerated fear of the accompanying pregnancy. The following case is a good example:

Case.—*Appendicitis in the Fifth Month of Pregnancy; Removal of the Appendix; Recovery.*—Mrs. C., during the fifth month of her first pregnancy was seized with abdominal pain immediately after taking a cold drink. She developed symptoms which were con-

sidered by her medical attendants as being those of appendicitis and on the fourth day of the illness I was asked to see her. The diagnosis was evident and the patient was removed at once to Rex Hospital, where I opened her abdomen in the right iliac region by a small incision. The appendix was easily found,—enlarged, inflamed, containing about a drachm of pus and adherent to the right ovary. The patient made a good recovery, though the convalescence was marred by a catgut suppuration in the wound and two attacks of renal colic, following the last of which she passed a few small calculi. On the day following the operation there were some intermittent uterine contractions, but she did not abort and was delivered of a healthy child naturally at term.

IV. In conclusion, I desire to refer to a case which was of peculiar interest to me and which I have also reported elsewhere, (Seaboard Medical Society, Dec., 1902). I bring it up in this connection because it has a bearing on the present subject and on account of further light being shed upon it by more careful investigation.

Case.—*Intrauterine Pregnancy Mistaken for Ectopic Gestation; Cyst Removed and Uterus Manipulated; Recovery with no Interruption of the Pregnancy.*—Mrs. X., age 22,who had been married 16 months, missed her menses three times in succession, had nausea and vomiting for three weeks and her breasts were enlarged and tender. She then had an attack of cramps resembling cholera morbus and a slight bloody stain on her genitals but no distinct hemorrhage. When she came under my observation (Aug. 5, 1902,) she complained of pain in the lower abdomen especially on the left side and of frequent and painful micturition. She had noticed no abdominal enlargement. On examination there was found a mass chiefly in the left side of the pelvis, filling up the posterior vaginal fornix. It was boggy and tender to the touch. The uterus appeared to be pushed toward the right side, but was continuous with the mass. A sound was introduced readily into womb to the depth of three inches. An operation was advised and consent given. The abdomen having been opened by a 3-inch median incision, a retroverted gravid uterus was brought to view and it was seen to be twisted on its axis toward the left, while the left cornu was stretched outward into a pouch in which were the extremities of the fetus. The position was corrected, the uterus moulded into shape by manipulation, and a small ovarian cyst removed. There was no extra-uterine pregnancy. The abdomen was closed with the tier suture and the patient made a perfectly normal recovery, giving birth at the end of nine months to a healthy child.

H. A. Kelly (Oper. Gynec., vol. 2, p. 448) speaks with emphasis of this peculiar condition of the uterus in normal pregnancy "which might easily be mistaken for an interstitial extrauterine pregnancy." He notes that the impression conveyed to the examining finger is that of a cyst "situated up in one corner of the uterus," and that a remarkable feature of the condition is its association "with more or less severe pain." He says further: "If my interpretation of these cases is correct, this condition affords an explanation of some of the cases reported as extrauterine pregnancy becoming intrauterine with or without the assistance of the electric current. On the other hand, the objection may be offered that these cases are in reality interstitial pregnancies with an ovum simply lodged very near to the uterine cavity and becoming

intratuerine with the increase in size of the ovum, as interstitial pregnancies not infrequently do."

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The Complications of Gastric and Duodenal Ulcer.

By John H. Gibbon, M. D., Surgeon to the Pennsylvania Hospital and Bryn Mawr Hospital; Consulting Surgeon to the Woman's Hospital of Philadelphia.

In discussing the complications of gastric ulcer it is not my purpose to include those complications which follow rather than accompany the ulcerating process, namely, pyloric, stenosis, hour-glass stomach, malignant changes, etc., but to confine my remarks particularly to those two fatal catastrophies which occur during active ulceration, excessive hematemesis and perforation. And yet I must say a general word as to the present day relationship which surgery bears to the treatment of gastric ulcer, for if this were universally understood and practiced there would be little use in talking about the complications; they would be indeed rare.

I am convinced that in the recognition and treatment of gastric and duodenal ulceration, and these two conditions may well be considered together, we in America do not take the first rank, as we do in so many lines of surgical work. And in making this statement I am not unmindful of the fact that gastric ulcer is not so common in this country as in England for instance. A few men in this country who have given this subject particular attention, notably, the Mayos of Rochester, Minnesota, have had an enormous experience in the surgical treatment of gastric ulcer, and when one considers their environment the only conclusion possible is that hundreds of cases of gastric ulcer go undiagnosticated and improperly treated.

It has been found by a number of independent investigators (Brinton, Welch, Greenough and Joslin) that gastric ulcer, open or healed, is present in about 5 per cent. of persons dying from all causes.

If this estimate is true, as it unquestionable is, it is evident that we have a great deal to learn, both as regards diagnosis and treatment.

Before taking up the complications let me say that it is now a recognized fact that when medical treatment properly carried out does not result in the cure of a gastric or duodenal ulcer, some form of gastric drainage is imperatively indicated and this is best accomplished by either a posterior gastroenterostomy or a pyloroplasty, preferably that of Finney. It is only by a close adherence to this rule that dangerous complications and sequelae may be avoided. Too often cases are operated upon for perforation which have been treated medically for years with but only temporary improvement. This was true in a case I operated on in October last and which is included in a series of four cases operated upon during the preceding nine months and reported in *American Medicine,* December, 1903. The patient had been ni the hands of excellent physicians for about five years, the condition diagnosticated and an operation recommended, to which the patient would not consent. Perforation occurred after about four weeks of most rigid medical treatment and while the patient was being carefully watched and treated. Operation was done nine hours after the perforation and the patient made a good recovery. An earlier operation would have in this case cured the patient with

a risk not to be compared to that which he chose to run.

I must say, however, that in so strongly recommending surgical treatment of obstinate and persistently bleeding gastric ulcers, it should be carried out by one who has carefully familiarized himself with the technique of gastric surgery, either by experience or by practice upon animals, and only in the presence of the most thoroughly aseptic environment. Unless these conditions exist, the patient is safer in running the risk of the complications of which I speak.

Hematemesis.—Bleeding from a gastric ulcer occurs in probably about half of the cases and may be indicated either by hematemesis or melena. If a careful microscopic examination is made of the vomited material in cases of gastric ulcer blood will be found much more frequently than is expected. The bleeding varies greatly in character and frequency. Not infrequently it is the first symptom which calls attention to the condition. When this is true the ulcer is apt to be an acute one and the hemorrhage moderately profuse. Moynihan states that when the hemorrhage is rather profuse and the only symptom present, it probably comes from a number of small ulcers, such as have been called "weeping patches." The first attack of bleeding from an acute ulcer, which comes on suddenly and unexpectedly, can nearly always be controlled by medical means, such as rest, the administration of opium, etc., or in fact it may stop spontaneously. The bleeding is apt to be repeated in small quantities and not at frequent intervals.

Bleeding from a chronic ulcer may be very trivial or it may be suddenly fatal from the opening of a large vessel, such as the splenic, the aorta, the vena cava, or the pancreatico-duodenal artery. The bleeding which threatens life may be either the frequently and persistently repeated small hemorrhage, from the resulting anæmia of which the patient does not recover, or the single profuse hemorrhage. The latter, however, unless a large vessel has been eroded, is not as dangerous as the former variety.

The mortality of gastric hemorrhage is variously estimated at from 3 to 8 per cent. of the cases in which it occurs. Death from this source, however, is more frequent than the casual observer would suppose. Douglass, of Nashville, Tennessee, reports four fatal cases of gastric hemorrhage in his own private practice, and I know of a number of cases of fatal hematemesis which have never been recorded.

The surgical treatment of gastric hemorrhage is a practice of comparatively recent years, but the results obtained certainly warrant its further application. Most authorities agree that an operation for a primary profuse hemorrhage really threatens life, and even then the value of operation is questioned by many. The decision as to the course of treatment in such a case requires the exercise of one's best judgment and is one of the most important questions which the surgeon has to decide. In the cases of persistent small hemorrhage and those in which there have been two or three profuse hemorrhages surgical interference is certainly indicated. Just what form of operation should be done is still a matter of debate. I believe, however, from a study of the literature of this subject that the establishment of free gastric drainage will give the most satisfactory results. This, I am confident, is true in cases of bleeding from multiple ulcers, and in those of repeated small hemorrhage. Where operation is done, however, for

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frequently repeated profuse hemorrhage or for a single profuse hemorrhage threatening life, it may be wiser to follow the advice of those who recommend opening of the stomach and the ligation or cauterization of the bleeding points. It must not be forgotten that the hemorrhage may come from a number of different areas, and this is a strong argument against this method of operating, unless a gastroenterostomy is also done. In this connection it is interesting to refer to a case reported by W. J. Collins (*Lancet*, Feb. 8, 1902), in which death resulted from hemorrhage from a duodenal ulcer eight days after operation for a perforated gastric ulcer.

I believe that the best method of directly controlling the hemorrhage from a gastric ulcer is that of passing a deep purse-string suture about it. Some authorities recommend the carrying of this suture through the entire stomach wall. Moynihan has reported remarkably good results from the simple performance of gastroenterostomy, even in cases of profuse hemorrhage, and in order to prove this operation insufficient those opposed to it must show that the patients dying after its performance do so because of continued bleeding. This operation is the only one which Moynihan recommends for gastric hemorrhage, of whatever variety, and his experience has been very large. By a thorough drainage of the stomach the walls of the organ collapse and the arrested hemorrhage is not apt to recur from a dislodgement of the thrombi. Moynihan believes that the recurrence of hemorrhage in chronic ulcer is due to dilation of the stomach, which causes the thrombi to become loosened.

Perforation.—Gastric perforation is a most serious catastrophe and by far the most dangerous complication of gastric ulcer. It occurs, according to Robson, in 15 per cent. of the cases. It is not, however, immediately or always fatal, nature being able occasionally to prevent the free escape of the gastric contents by the formation of adhesions, slow perforation or a perigastric abscess resulting. It would be ideally foolish, however, to expect nature to do this in any given case. The diagnosis and symptoms of gastric perforation can best be considered under three heads: that of acute, subacute, and chronic perforation.

In the acute variety the diagnosis is usually quite clear, the symptoms being nearly unmistakable. The history given may be absolutely negative, or it may be of the utmost value. Great attention should be given to any previous symptoms of dyspepsia, with or without vomiting, and to the passage of dark colored stools. In the acute cases the onset of pain is most sudden and severe, and is accompanied by a board-like rigidity of the abdomen. Tenderness in the neighborhood of the perforation is also a frequent symptom. At first, pain is accompanied by marked prostration and possibly vomiting. In other words, we are dealing with a case of perforative peritonitis in its early stages, and it is at this time that the condition should be recognized and treatment instituted. The perforation may have resulted from some mechanical strain upon the wall of the stomach, such as distension by food or a carbonated drink, or by muscular exertion. In one of my own cases the perforation suddenly occurred when the patient was lifting a buggy. If the patient is not relieved at once by operation, the symptoms increase, until a tyro could make a diagnosis of general peritonitis. The vomiting which may have preceded or immediately followed the perforation is

not likely to recur after the peritonitis is well established, and the pain which was at first localized is apt to become general. Fortunately, acute perforation usually takes place in ulcers situated upon the anterior wall of the stomach. Posterior ulcers, when they do perforate acutely, result ultimately in the infection of the greater peritoneal cavity by the passage of the infected material through the foramen of Winslow.

The symptoms of a subacute perforation are less sudden and less severe than those just described. In these cases there is usually time for the outer coat of the stomach to become more or less adherent to some neighboring peritoneal surface, or the opening may be so small or the stomach so empty that any extravasation is partially walled off by adhesions or slowly passes down into the pelvis. In this variety of perforation the patient may at first suffer considerable sharp pain, which, however, gradually subsides and the development of the peritonitis is much slower than in the acute form. In these cases it is often very difficult to make a correct diagnosis, since in many of them the symptoms are directed to the pelvis. In many of them and especially of duodenal perforations, the diagnosis of appendicitis is made. This has been true in a remarkably large number of cases of subacute perforations, and it is a mistake which I made in a case of duodenal perforation operated upon about a year ago. In cases where this error has occurred the omentum is usually found adherent to the abdominal wall except over a small track, through which passes the infected gastric contents, which find their way into either the right iliac fossa or the pelvis. As a point of diagnostic value Moynihan has called attention to the fact that in the subacute variety of perforation there is usually a complaint of gastric discomfort for several days preceding the actual perforation.

Chronic perforation takes place usually upon ulcers situated upon the posterior wall of the stomach and results from adhesions which have taken place over the sight of the ulcer. The outcome of chronic perforation is a perigastric abscess usually of the subphrenic variety. Cases of this kind have been reported in which the abscess has evacuated itself into the pleura and lung.

Treatment.—The result of the treatment in the acute variety of perforation will depend largely upon the promptness with which it is instituted. As in typhoid perforation, I believe that operation should be done as soon after the onset of symptoms as is possible. The proper aseptic precautions, however, should not suffer from haste to repair the perforated gastric wall. In many instances the point of greatest tenderness will indicate somewhat to the surgeon the best point at which to open the abdomen; in the absence of such indication, however, the stomach should be exposed through the right rectus muscle. Attention should first be given to finding the opening in the stomach wall and when this is found the ulcer should not be excised or its edges pared, but should be inverted by deep sutures of either silk or chromicized gut. It is important, I think, to pass these sutures deeply in order to thoroughly cut off the blood supply of the old ulcerating area. Occasionally, it will be found difficult to close the ulcer, and it may be necessary to pass the stitches at a considerable distance from the perforation. Two, or possibly three, rows of sutures may be required. It must be remembered at this time that frequently multiple ulcers are present, and therefore a search for others should

be made. If no perforation is found on the anterior surface of the stomach or duodendum, the lesser peritoneal cavity should be opened through the gastrocolic omentum and the posterior wall of the stomach carefully examined. If the perforation is found here it can be exposed to view through the opening in the omentum and closed with little difficulty. Unless there are multiple ulcers, or unless the ulcer is situated at and constricting the pylorus, I do not believe that it is wise, when a patient is suffering from an acute or subacute perforation to do a gastroenterostomy, since in practically all the cases which recover after the simple inversion of the ulcer a cure results.

Having dealt with the ulcer, attention should next be given to the thorough cleansing of the abdominal cavity, and unless the extravasation has amounted to practically nothing, I believe it to be the part of wisdom to thoroughly irrigate the entire abdominal cavity with warm salt solution. In all of my own cases there was considerable extravasation, and in all of them I drained the pelvic cavity through a small suprapubic opening. This, I believe, is imperative in operations for subacute perforation where the pelvic cavity or iliac fossa has contained a quantity of infected material. Where there is a doubt as to the diagnosis and the symptoms seem to indicate pelvic or appendiceal inflammation, there is no objection to first sponging the abdomen over these regions and thereby learning definitely the cause of the peritonitis. I believe more strongly even in drainage than I do in irrigation and in all of those cases I have operated upon I have used a gauze drain down to the site of gastric perforation and have also drained the pelvis. In the acute perforation the irrigation with the hot salt solution not only acts as a cleansing agent, but is also an excellent combative of the shock from which the patient is usually suffering. I admit there are cases of acute perforation with very little escape of gastric contents in which both irrigation and drainage are not needed, but they are rare.

Before leaving the subject of technique, I would say that in this condition, as in others of perforative peritonitis, the secret of success lies in the promptness of operation, in the gentlest and simplest manipulation of the diseased tissues, and in the minimum amount of anesthetic and the brevity of the operation.

The treatment of chronic perforation consists in locating and draining the abscess, and it is only necessary to say that when this is done it should be done in the simplest and most direct manner, and no attempt made at the time to do any formidable or formal operation

Radiotherapy For Cancer and Other Diseases.*

By Dr. W. W. McKenzie, Salisbury, N. C.

In the realm of physical science numerous inventions and discoveries have been made in recent years, which attracted the attention of many members of the medical profession. In the therapeutics of the profession many discoveries and inventions in the allied sciences have been proved to be invaluable adjuncts in the treatment of diseases. They are too numerous to mention here. However, there is one discovery that has attracted

*Presented to the Tri-State Medical Society of the Carolinas and Virginia at the Danville meeting, February 23, 1904.

more attention than any other made within the last three centuries, and it is with its therapeutic uses that I propose dealing with in this paper.

We all are aware that this discovery was made by Roentgen (accidentally), who is now famous the world over for his wonderful research in the "scientific field of mysteries."

Soon after the rays had attained a permanent place in the field of diagnosis it was observed that accidental dermititis was invariably set up. This suggested to the minds of the observing and careful investigator the possibility of the use of the rays in the treatment of various pathological conditions. Experiments were at once begun and the results have been very satisfactory. We are of the opinion that in the Xrays we have an agent which has proved to be of undoubted value in the permanent cure of malignant diseases.

The manner in which the X-rays act upon the diseased tissues has not as yet been clearly determined. When the therapeutic value of the rays were first observed it was believed that the action was of a bactericidal nature. This theory, however, was soon abandoned. The consensus of opinion now seems to be that instead of destroying the microrganism the X-ray stimulates them to further growth and reproduction; furthermore, it has frequently been shown that good results are obtained by the application of the X-rays to such pathological lesions as are absolutely free from bacteria; so say some of the most prominent pathologists and bacteriologists.

The effect of the rays has by some been attributed to a corrosive action of delicate platinum particles thrown out from the anodal surface.

Tesla believes it to be due to the generation of ozone in the diseased tissue. Schiff says that the curvature power due, not to the X-ray, but instead electrical waves given off from the tul Loudon thinks it possible that it is t influence the rays have in retarding mosis that the secret of this biologi and therapeutical action lies by retar ing the osmotic processes throughc the system.

A consideration of the entire su ject of radiotherapathy in its pres stage of development seems to have room for doubt that we have in it most valuable addition to the means our comand for combating diseas One of the greatest values of the met od lies in the fact that it is applical to certain groups of diseases whi have hitherto been classed among t most intractable with which we have deal. This applies not only to its u in malignant diseases, but to its use certain less grave affections, which ha ben the trial and the bane of dem tology. It is a valuable addition to t methods at our command for he: ing hypetrichosis, acne and sycos and that in itself is no sm: gain to dermatology. Its use tinea tonsurans and favus is le well established, but is unquestionab worthy of persistent trial. In the tre: ment of psoriasis, lichen plan there seems good reason to believe th the method has a distinct field of us fulness. Its value in lupus erythem tosis is not well established. Tl method and Finsen's method of treati lupus with ultra violet light has ina gurated a new period in the treatme of that most intractable and distres ing disease.

Carcinormatta can be made to disa pear and can be replaced by healtl tissue. This is established not on clinically, but also microscopically- such a disappearance of a maligna

rowth is a new fact. The theoretical dvantages which the method offers re:

1st. It is painless; it avoids operaon.

2nd. Under proper conditions it deroys diseased tissues, but leaves the ealthy tissue in its place.

3rd. It leaves small scars.

4th. It is not only painless, but it sually has a marked anodyne effect in ainful malignant diseases.

5th. It has a field of usefulness in ases of which ordinary methods are npossible, because of the amount of ie destruction of tissue which complete emoval would require. In other words, is applicable to some inoperable cases. n these cases the method has a very nsiderable number of not only brilant but amazing results to its credit. As to the effect upon malignant rowths, which involves the cavities of e body, the standing of the method not yet established. There are some cts which give us reason for encourgement in these cases. Pain can be ntrolled and there is reason to believe at in some cases malignant growths uated in the cavities of the body can checked in their course and perhaps duced in size by applying the X-rays ready at our command. In acne the ys are extremely valuable—the most illiant results are obtained, even in ng standing cases. It is also of value many cases of eczema, both in reving the itching and in effecting a sappearance of the eruption. The ys have proved of great benefit in current vesicular eczema of the hands d feet. The rays will cure practilly all patients having superficial can-r, and some with carcinoma of the egument. But the majority of deepated cutaneus and subcutaneus owths do not so well. They may improve for a while and deceive both the patient and the doctor, but relapse, and subsequently begin to spread. Buccal epithelioma and deep-seated epithelioma, involving the lip, had better be treated surgically and afterwards subjected to radiotherapy. Superficial epithelioma may be cured by many methods, but none give such beautiful cosmetic results as the Rœtegen rays.

At the annual meeting of the Medical Association of the Greater New York, Dr. Branth read a paper in which he reports encouraging results in the treatment of epilepsy by means of Rœtgen rays: He stated that in many instances the occurrence of the seizures was believed to depend upon the instability of the cellular brain elements, or an abnormal metabolium, and as it was accepted by many authorities that the X-ray stimulates the vital activity of protoplasum, it was upon the theory that the treatment was adopted. Naturally, he said, all cases of epilepsy are not amenable to it, as for instance, those in which decisive degenerative processes in the brain have set in. By radiegraph taken by himself, Dr. Branth demonstated that part of the X-rays unquestionably pass through the skull, and he regarded it as fair to assume that more than twice the quantity pass through the middle of the brain, as in light the power diminishes by the square of the distance. In his cases three treatments per week are given, beginning with five minutes exposure at fifteen inches distance, and gradually extending this to ten minutes exposure and ten inches distance. A hard, or high, vacuum tube is employed and a different part of the skull is exposed at each sitting. In both grand and petit mal it has been observed that the seizures become lighter and of shorter duration, that the intervals become longer,

and that if an attack occurred it was followed by less prostration. In patients with six and eight seizures a day, treatment has been taken for a few weeks, intervals of two and three weeks were noted. The hair may drop out in areas, but it is certain to return in a stronger growth than before. A remarkably successful case was presented —that of a lad of fourteen years of age who had not had a single seizure since the treatment was commenced and who had astonished his family and teachers by the extraordinary improvement he had made both mentally and physically.

The most beautiful theory and one most far-reaching in its application is that of Dr. Wm. Allan Pusey, Profes sor of dermatology at the University of Illinois. His theory stated briefly, is that the effect of the X-rays upon all living tissue is essentially destructive, and inasmuch as the cells of pathological tissue have less vitality and resistive power than those of healthy tissue, under the influence of X-ray pathological tissue undergoes degeneration and disappears first, before normal tissue

A few cases which have been treated by my associate, Dr. John Whitehead and myself, I will briefly mention.

Case No. I. Male, aged 60. Epithelioma of upper lip, in which the greater portion of lip and small part of left nostril was eaten away. Gums under upper lip had also become involved. After three months treatment by the X-ray, the entire surface had healed over and the deformity was very small. The entire surface was smooth and soft, except a small nodule on left side of face. This spot was evidently suspicious and should have been treated, but patient's poverty would not permit of his remaining longer in Salisbury.

No. II. Female, age 48. Epithelioma on leg and right side of nose. All kinds of salve, curatives, etc., had been used by different parties, from which patient received no benefit, but by treatment for only two and a half months growth entirely disappeared.

No. III. Female, age 26. Lupus vulgaris; long standing. This involved the whole of left cheek and left side of neck. Complete recovery.

No. IV. Male, age 70. Epithelioma of right ear. One month's treatment entirely cured. No deformity.

No. V. Female, age 42. Epithelioma of nose. Recovery in one month. Small scar.

No. VI. Female, negro, age 48, Epithelioma on forehead. Two months' treatment. Recovery. Small scar.

No. VII. Female, age 26. Scrofula derm. Both hands and arms a mass of scales and pustules. One month's treatment. Complete recovery.

No. VIII. Female, age 43. Epithelioma of back, large size, and on face. Two months' treatment. Recovery.

No. IX. Female, age 45. Epithelioma of back. One month's treatment. Recovery.

No. X. Female, age 84. Epithelioma of forehead; 16 years standing. This extended from base of nose, taking in almost the entire forehead and up into hair, and most offensive odor. It was most wonderful to see how rapidly this ugly mass crumbled and disappeared. It required two or three exposures to get rid of the very offensive odor, and in 3 months the mass disappeared, leaving healthy tissues and a small scar. But she will never be entirely cured as a nodule developed on angle of lower jaw and thorax.

No. XI. Male, age 49. Involving base of nose, eating through same and extending into ethmoid cavity and bone.

He is improving and still under treatment. Prognosis good.

Puerperel Sepsis.*

By H. S. Lott, M. D., Winston-Salem, N. C.

Puerperal sepsis is of frequent occurrence. That this is true, is a pity. A reflection upon the science and art of midwifery, and also upon the success of our strivings for surgical cleanliness. Nor do I mean alone the alarming or fatal ones, for this is not the case; but, that the lights of today have scattered the shades of mystery, and we know that about all of the ills that follow in the wake of confinement are due to septic infection.

The clinical pictures presented vary in degree of intensity.

For instance, that of the classical "milk leg" or with the "milk chill" for its precursor, there may be only the fleeting cake in the breast, terminating in early resolution; or, with a trifle more of the infecting poison, lengthened out through weary days and weeks, of abscess formation. In like manner, we may have a pulmonary congestion, terminating in a pneumonia; a hepatitis, either with or without the terminal stages of inflammation; or, what is more likely, among the parenohymatous organs, a nephritis; with the renal secretion so altered as to deplete the system by the excessive volume of its excrement; or, the renal excretion so lessened, that the patient is overwhelmed by the volume of poisons retained.

Such conditions in organs remote from the pelvis and the primary field of invasion may occur without marked symptoms there, and yet be due to septic infection at the time of confinement, which invades the system through the lymph, or other fluid channels, and may, in great part, spend its virulence in the course of its transit.

Puerperal sepsis, then, may be classified under three heads. The cases cited forming one class, and being those in which the poison becomes localized, from a secondary focus, in parts remote from the pelvis.

A second group are the cases of general infection, and is a type of much interest, from the fact that the clinical picture presented may so easily mislead. These are the long cases of "fever," following confinement. With a stay which is comparatively short and only a few light chills, it passes muster under the charitable colors of "malaria," or, and what is more likely, the more prolonged attack, with a tender uterus, recurrent chills and sweating intervals, insomnia, loss of appetite and no milk in the breasts. As a rule, there will be a quick and feeble pulse, with a tendency to syncope upon sudden exertion; a temperature subject to sudden flights of variation from nearly, or quite, normal to 104 to 105 degrees. These cases, terminating with a patient who is either a hairless skeleton, or a corpse, are dignified with the title of "typho-malaria;" or, if the pulmonary focus makes itself evident, by a cough and a stitch in the side, it may be either "quick consumption." or the typhoid-pneumonia."

The third group, and the ones most frequently brought to the notice of the gynecologic surgeon, are those cases in which the pelvic organs, and their surrounding structures, are first invaded, and hold the poison throughout its destructive course.

In the first two groups, a physical examination of the pelvis will reveal very little, save, perhaps, a tender uterus, with some subinvolution; while in the last, a bimanual examination will

*Read before Forsyth County Medical Society, March 8, 1904.

reveal one of two conditions: either a large, boggy uterus, with a gaping os, from which an offensive discharge is constantly flowing, or a blocked pelvis, with a fixed uterus, and appendages, while great tenderness will exist on both sides, but be most marked, perhaps, behind the cervix, Doulas' pouch being the point toward which the pent-up poisons tend most naturally to gravitate.

Now, the cause of these conditions is a destructive germ, which,lying dormant, may be only wakened into life and the prosecution of its ravages, or gains access to the system from outside sources at the time of confinement. And its point of entrance may be either within the uterus, at the placental site, or without the uterus, from some tear in the cervix, or even some slight abrasion in the vaginal walls. Its variety may be that of the pus germs, pure and simple, or it may be either tubercular, syphylitic or gonorrhœal. In either case, the results of its invasion are both hazardous and destructive, and may be prevented by surgical cleanliness.

The results of puerperal sepsis are not the fatalities alone, for these are few in comparison to the very large number of cases; but we must consider the crippled condition in which it leaves the woman afterwards.

For instance, among the minor, but very frequent sequelæ may be mentioned the maimed breast, which, after passing through the conflagration of an abscess, fails to perform its function after subsequent confinements.

A chronic nephritis, which never clears up perhaps, or a pulmonitis, which favors the development of tubercular foci.

Among pelvic conditions, we may have a tender and subinvoluted uterus, which saggs down upon its weakened supports, and brings with it an unmistakable chain of distressing symptoms. An abscessed ovary, resulting in the destruction of this organ, or, last, but not least, the agglutination of the fimbriac of both sides to their respective ovarian bodies, which means not only constant pain for the woman, but sterility throughout the balance of her life.

Treatment of puerperal sepsis resolves itself into those measures which are supportive and eliminative. These wants may be accomplished by both medical and surgical agencies. In this condition, rather more than in any other, the two go hand in hand, the surgical measures being but supplemental to the medicinal agents, and promoting elimination of the poisons.

In fact, the condition being fairly acknowledged, the treatment is simple enough. At the onset, an examination should be made, to determine the condition of the uterus, and this should be done under the strictest measures of cleanliness. At this time, a simple irrigation of its cavity with a gallon of normal saline solution, introduced through a tube without sharp edges, will reveal to us the kind of material which has collected there; and often this procedure, followed by a full dose of calomel and soda, with epsom salts in its wake, will clear up the symptoms wonderfully, and start our patient on the road to health. But as often it will not, and we know by the character of the discharge that something has been retained in the cavity of the uterus, and when this is the case, our irrigation may be prefaced by the very gentle and very careful use of the dull curette, going over the entire surface of the uterine cavity, removing all detachable particles and striving to avoid opening up fresh channels for infection.

These irrigations of the uterine cav-

ity should be done at least every eight hours—three times in the twenty-four—and should be done by some one who knows how. The bowels should be kept well open, with an occasional dose of calomel and soda, followed by epsom salts, and the patient should be well nourished and stimulated.

It is astonishing the amount of alcohol, in the form of either whiskey, brandy or sherry wine, that these patients can take with none other than good effects. The system needs it, and it is antidotal to the existing poisons. Opiates are contraindicated, and I deem it almost criminal to give them. They lock up the secretions, and rob our patient of her chance of throwing off the poisons through nature's own avenues.

When the toxæmia is profound, intravenous or subcutaneous, transfusion of normal saline solution may be helpful, as it not only dilutes the poisons throughout the system, but stimulates and nourishes the patient as well.

The serums I have not used, but the reports of them by the best observers are not favorable.

When, under these combined supportive and eliminative measures, the patient does not make favorable progress; and especially when the pelvic symptoms are pronounced, opening Douglas' cul de sac by a free incision through the posterior vaginal vault, freeing uterus from bowel, and appendages from surrounding structures, so far as the hand can safely reach, irrigating the cavity thus opened with several gallons of normal saline solution, and, finally, introducing well distributed gauze pack, and wicks for drainage, is a justifiable procedure, and will benefit the patient.

In fact, in many cases, which look bad from the beginning, if this were done early, it would be better, and the reasons can be made very plain.

We know the uterus and its neighboring structures to be the original focus of infection, and also that the infecing material may be carried into the general system, either from the uterine walls direct, by its lymph and blood currents; or that it may transude these walls, thus finding its way into the pelvic and peritoneal cavities, and also finding a broader field for general distribution and the propogation of its species.

Now, the procedure which has been described, and was first suggested, I believe, by Pryor, of New York, invades this field of distribution and accomplishes two very important ends: the first is, to protect the system from further absorption of poisons, by envelcping, as nearly as can be, the uterine body with protective gauze; the second, which is accomplished by repeated irrigations of this cavity with normal saline solution, with renewal of the gauze pack and drains at stated intervals, is to favor the elimination of poisons, which otherwise must either be taken up and exhaust themselves in the course of their transit through the patient's circulation, or, becoming localized, result in pelvic abscess, with all of its distressing and destructive sequelæ.

Some Clinical Observations on the Prophilaxis Treatment of Uric Acid Conditions.*

By J. C. Walton, M. D.

The importance of promptly recognizing the immediate and remote effects of the baneful influence of uric acid excess on the blood and tissues of the organisms and the good results from the

*Presented to the Tri-State Medical Association of the Carolinas and Virginia at the Danville meeting, February, 1904.

proper management of such conditions, contrasted with the unsatisfactory results frequently found in their treatment is my apology for addressing you upon this well worn and hackneyed subject.

How much of function and of life might be restored and maintained by the intelligent management of such conditions! How much suffering, heart disease, chronic nephritis arteric sclerosis and many other similar conditions averted by neutralizing the effects of this irritant upon the tissues. Statistics show that about one-third of all cases of heart disease are due to rheumatism. I believe that a great many cases of chronic nephritis, and my experience corroborates it, are undoubtedly due to the irritating effects of uric acid upon the uriniferous tubules. I have no new theories to exploit, but having had rather unusual facilities and considerable experience along these lines in sanitorium work, where the patients were kept under close observation and were enabled to get the benefit of modern methods of treatment, especially as regards diet, regime, etc., I will as briefly as possible give the line of treatment found most satisfactory in such conditions, and can commend the same. The cases treated included many of gout, rheumatism , myalgia, sciatica, lumbago, neuralgia, chronic nephritis, arteric sclerosis and gastro intestinal troubles. A careful urinary analysis was made in nearly all the cases and almost invariably a large excess of uric acid was found, which gradually subsided and approached the normal as the disease yielded to treatment. A noticeable fact was that the more chronic the conditions the less amenable it was to anything like drug medication and the nearer we approached the lines of physic therapy, or nature's own methods, the more satisfactory were our results, including such matters as diet, exercise, clothing, water drinking, bathing, hot air, electricity, massage, etc.

Diet is of vital importance. No matter how thorough and complete elimination may be, you have got to limit the uric acid intake while trying to increase the output to the utmost. Avoid red meats, pork and beef, tea, coffee, cocoa, tomatoes, rhubarb and an excess of sweets and starches. Allow fruits, vegetables, mutton, fowl, fish, oysters, cheese, butter and milk. Whether tea and coffee, according to Haig, contain large quantities of uric acid or their equivalent Xanthin compounds, I am not prepared to say, but I believe that they are especially unsuited for rheumatism. One case that I recall, who after returning from Hot Springs, Ark., and his rheumatism persisting notwithstanding a rigid diet otherwise, with the single exception of his coffee, and after stopping the coffee the disease promptly subsided. I have been impressed with this fact sufficiently often in other cases to convince me of the bad effects of coffee, tea and chocolate under such conditions.

Exercise, especially in the open air. Human beings like plants, require an abundance of fresh air and sunshine. Keep the skin, bowels, kidneys and all of the eliminating organs at work. Lack of exercise, over-eating, drinking too small quantities of water, and the consequent retention of toxic substances in the blood, non-elimination, auto intoxications are sources of the most potent causes of disease. Get a hump on yourself; step lively and sweat a little and keep your sewers open. There is one thing a rheumatic should never do, i. e., giving up; keep going. The worst case of anthritis deformans I ever saw, ankylosed joints, bad heart, pronounced

hopeless by the best physicians, got for a time relief from his pain with hot air and keeps on the road constantly and says that the only thing that has kept him alive is his full determination not to give up the ship. In regard to auto intoxicants: In a recent conversation, a noted New York surgeon who is celebrated for his hard horse sense remarked, that the most valuable lesson of a busy life was the importance of recognizing auto intoxication, especially of the gastro intestinal tract as the majority of mankind are poisoned by their own toxines.

Clothing—These subjects are very susceptible to sudden temperature changes and should wear flannels the year round; light woolen of course for warm weather, as the heavy ones are too depressing.

Water Drinking.—It is surprising how few people drink enough water—water being the natural sewer of the body, the great solvent and eliminator, flushing out all the channels of the body, eliminating and dissolving the toxines, keeping the secretions going and promoting a general feeling of well being. Drink from one to four quarts daily. Don't drink during or after meals, as it interferes with digestion by diluting the gastric juice. Always drink pure water, preferably a good alkaline mineral water containing a good per cent of potash and soda, as they are among the best acid solvents.

Bathing.—The skin is by far the best medium for the elimination of uric acid, and other noxious products and they can be more rapidly and safely eliminated this way than any other. The skin is rather a lazy, sluggish organ; the pores are easily clogged up and it frequently requires a lot of stimulation by friction, heat, etc., whipping up, you might say, before it can be made to do its duty and perform its functions. One of the worst cases of gout I ever tackled was a man of 30; came on in infancy. He had been to Hot Springs three times, with very little benefit. At the beginning of treatment it required 40 minutes in a hot air cabinet at a temperature of 165 degrees to produce a good sweat; later as improvement progressed, the perspiration came on in shorter time, and finally in 20 minutes and as the action of the skin approached the normal, the disease subsided and convalescence was rapid. In private practice hot baths are most convenient, but in institution work the Baruch tonic bath is far and away ahead of any system of baths known to the medical profession. By means of the hot air cabinets we can regulate the perspiration and get all of the elimination needed, and this can be followed by a system of graduated douches which tone up the nervous and vascular systems acting as a powerful reconstructive and tonic and prevent the taking of colds, that bugbear of that abomination, the Turkish and Russian bath.

Dry hot, or super-heated air: One of the most rapid eliminators of toxines known, so much so that Hare in his system of Therapeutics states that there is sometimes danger of lighting up an acute exacerbation of gout or rheumatism from too suddenly throwing into the circulation large quantities of uric acid. This method of treatment is admirably adapted to all painful and inflammatory conditions, especially sprains, luxations, chronic and subacute articular rheumatism, synovitis, ankylosis, adhesions, exudations, deposits, etc. It is astonishing how old deposits and adhesions, unless organic in nature, can be dissolved and broken up, especially when followed by judicious massage.

Electricity, especially static. I know

of no agent as effective for the relief of all painful conditions whether of joints, nerves or muscles, and as a general all round tonic, sedative or invigerator, than static electricity. Is simply invaluable, old sciatias, lumbagos, the pains of locomoter ataxia and general neuralgic condition, frequently yield to static electricity, after all known measures have failed. As a sedative, as a hypnotic and in all neurasthenic conditions, it is unrivalled. Finally an invaluable adjunct to all these is a good masseur. A good one is hard to find, but they are simply indispensible.

In conclusion, gentlemen, the short time at my disposal, does not allow me to even approximate justice to this important subject, and the most I could hope for is to call your attention briefly to a few of the important landmarks in the prophylaxis and treatment of such conditions.

A BRIEF REPORT OF CASES.

Mr. H., aged 30, inveterate case of sciatica, right side of over a year's duration, complicated with subacute articular rheumatism of the left knee joint. Usual treatment, Baruch baths, electricity, etc. Case very rebellious, and only finally yielded to bombardment of the nerve with heavy static sparks daily. Dismissed case cured after four weeks' treatment. In this ease is strikingly illustrated the value of electricity.

Mr. W., prominent attorney, ill more than a year. Case pronounced rheumotoid arthritis, and prognosis hopeless. Had spent some time in hospitals in Hot Springs, Va., and had exhausted all of the usual orthodox treatment with no benefit. General condition very bad; required large doses of opiates at night and rested very badly. Both shoulder joints very stiff and painful, could not use arms or hands. After trying the usual treatments with no benefit whatever, and as a dernier resort, put him upon hot air and massage, using the hot air for one hour daily, followed by thorough massage, with gradual relief and complete recovery in a few weeks. Has remained so. This case strikingly shows the benefit of hot air and massage, and I don't believe anything else would have cured him.

Young man was affected with attacks of rheumatic gout from infancy. Had been to Hot Springs, Ark., three times. Disease confined to the feet and knees. Baruch baths and electricity effected a cure in a few weeks. Relief from the baths in this case was striking. Another case, skiagraphs, showed a calculi in each ureter. Patient suffering considerably with pains over the kidneys and ureter. Two weeks' treatment with Baruch baths and static electricity, entirely relieved pain and apparently produced a cure. Patient left suddenly and unfortunately was unable to get another picture. Was well when heard from several weeks later.

To Keep off Mosquitoes.—Throw a piece of alum about the size of a marble into a bowl of water, and wet the face and hands and any exposed part lightly with it. Not a mosquito, it is asseerted will approach you. —*Medical Times.*

In giving ether it is a mistake, after anesthesia is complete, to continue it until it becomes very profcund, and then leave it off until the patient shows signs of returning consciousness. Allowing the patient one breath of pure air to every four or five of ether will commonly keep him in excellent condition, while the anesthesia is effective and safe

ABSTRACTS.

One Thousand Cases in Students' Outdoor Obstetric Practice.

By John F. Winn, M. D., Richmond, Va., in *Journal of American Medical Association,* Vol. XLI., No. 14, page 847, Oct. 3, 1903.

Dr. Winn's report of his Students' Out-Clinic in Obstetrics at the University College of Medicine, Richmond, Va., presents many points of interest and scientific value. The mortality was low—5 deaths in 1,000 cases, or one-half of one per cent. One death from postpartum hemorrhage, one from eclampsia, one from septic peritonitis supervening upon rupture of gonorrhœal pus tube, as revealed by autopsy, one from shock complicated by late stages of tuberculosis, and one from apoxplexy induced by eclampsia. The mortality rate contrasted with clinics older and better known gives this second place in point of low mortality. The others referred to being the Frauen Klinik, Berlin; Obstetric Clinic, Prague;; Baudelocque's Clinic, Paris; and the Society of Lying-in-Hospital, New York City. Considering that most of the deliveries were under unsanitary surroundings, this showing is the more excellent. The aim has been to impress the students with the danger of infection, and, without making any great array of septic paraphernalia, to reduce the system of disinfection to the simplest possible tecnique. Special care is observed in making vaginal examinations, but the ante-partum vaginal douche is not employed. The effort is made to keep the hands, and particularly the examining hand, sterile, and both genital and hand disinfection is repeated before each examination. Vaseline is not employed as a lubricant. Reliance is placed on thorough scrubbing of hands and forearm of each attendant followed in immersoin of bichloride, 1 to 1,000, not less than five minutes, and in lysol 1 drachm to the pint.

The very favorable showing is believed to be due in part to the scrupulous care bestowed on the genital tract during the third stage of labor, not only in guarding against the invasion of pathogenic organisms, but also in observing the time for, and the manner of, delivering the placenta. The author holds that the hasty and precipitate resort to Crede's method is largely responsible for the incomplete delivery of the placenta and membranes and for the sepsis frequently dependent thereon. For this reason, the management of this important part of delivery is based upon the cardinal principle that Nature has her own time for separating and expelling the placenta *at full term,* as indicated by a signal easy of recognition, and that any method designed to excite contraction before nature indicates that the placenta is ready to be cast off must be regarded as not in accord with natural processes. The uniform rule in this clinic is to place one hand over the uterus immediately after the child is born, but no friction is made nor is any effort exerted to excite uterine contraction so long as the uterus remains firm. The slight rising of the fundus, while firm, is the signal that the uterus is ready to expel the placenta. The lifting up of the uterus may occur before the average "twenty minutes" or it may be delayed. As soon as it is observed by the "sentinel hand," the uterus is grasped firmly with one or both hands and pressed downward in the axis of the superior strait. If after

waiting three-quarters of an hour, there is still no sign of placental separation, the Crede method is resorted to without further delay. The membranes, instead of being twisted into a rope, as recommended by many, are allowed to trail out, which they will readily do during that normal relaxation which follows uterine contraction. In a general way, all attendants act upon the principle that every placenta, at *full term* has its own time to separate, and that it is better to wait until that time arrives before resorting to artificial stimulation of the uterus. By the rigid observance of this rule it has been a rare occurrence to have even a retained placenta, and no cases of adherent placenta have been met with at all. All students are strictly enjoined to avoid interference with the genital tract after the child is born, and experience has demonstrated that, just in proportion as this rule is regarded, the puerperium is marked by fewer deviations from the normal..

Identification of Human Blood Stains.

Silverthorn, in closing an article on medico-legal autopsies in the *Canadian Prac. and Rev.*, has this to say on this subject:

"Until two years ago, the medical expert was not able, except in very rare cases, to give a more positive statement in regard to a blood-stain than to say that it was mammalian blood, and from examination and measurements it was consistent with human blood. At the present day one can go much farther and can state definitely whether a given blood-stain is human or not, and can even go still farther and state whether it is a stain from any alleged domestic or other animal.

This test is know as the "Serum Test" and is performed for testing human blood in the following manner:

A rabbit is given from three to six injections of human blood serum, about 10cc. each, preferably into the peritoneal cavity, at intervals of several days. Then the animal is allowed to rest for several days and some blood is then withdrawn from the animal and allowed to coagulate, and the serum is then used for the test.

If fresh blood is to be examined it should be diluted with normal saline solution to about 1-100, that is a light pink color, and then either allowed to settle and the supernatant clear fluid decanted, or else centrifuged and the clear portion used.

If dried blood-stains are to be examined, and can be scraped off on to a watch glass, a solution is made with distilled water, but if on bibulous material then some of it is cut out and allowed to soak in a small quantity of distilled water for some time to allow solution of the serum to take place. This is then diluted with a small quantity of normal saline solution, cleared and transferred to a narrow test tube.

To this liquid in the test tube is added a few drops of the serum from the treated rabbit (human-immunized rabbit serum) and at ordinary temperatures there is a precipitate after a little time, but at blood heat there is an abundant whitish precipitate distinct in a few minutes if the solution contains any human blood serum. This reaction occurs with no other species of blood except some of the apes, and here the reaction is a very faint one. In the same way any other species of blood might be tested for by injecting a rabbit with the serum from an animal of the species from which the stain is supposed to have come.

I do not know that this test has been used in any medico-legal case in Cana-

da as yet, but I have had some experience of it in an experimental way and can vouch for the practicability of it, and I may say that I have taken a series of twenty-four bloods, including the ordinary domestic animals, and many wild ones as well, and have found that none of them can be confounded with human blood, although that of the monkey will sometimes give a slight and slowly forming precipitate.

The tecnique, however, is not quite as simple as it might appear, although the difficulties are not insurmountable and require only patience and a little practice.

Treatment of Incurable Carcinoma Uteri.

Montgomery writes of this subject in the January issue of the *American Journal of Surgery and Gynecology*.

Two varieties are specially discussed. The squamous-cell carcinoma and the adeno-carcinoma of the cervix. These are not amenable to surgical interference, unless seen very early, and not always then. It is important to decide as to the curability of these cases by operation. When an operation offers no hope, they should not be deserted, as much can be done to stay the progress of the disease and prolong the life of the patient. The chief indication is to get rid of the necrotic tissue. This is done by cleaning the surface with the curette, scraping away the diseased tissue, cutting with the scissors or knife ragged portions or masses, staunch the hemorrhage with pledgets of cotton or gauze soaked in hot water, and thoroughly apply the thermo-cautery. By this, bleeding vessels are seared, and the infiltrated nests are partially destroyed by the heat. It removes the broken down tissue from which hemorrhage occurs. The removal of the necrotic tissue prevents the profuse, acrid, irritating discharge, nutrition is improved because there is no longer absorption of the toxine products. This advantage may be prolonged by packing the excavated cavity with iodoform gauze, which should be removed on alternate days and painted with strong tincture of iodine.

Chloride of zinc solutions, 4 to 8 drachms to ounce of water, applied by means of pledgets of cotton can be used but is disastrous to healthy tissue. This can be prevented in a measure by coating the surface with vaseline containing a drachm of bicarb. soda to the ounce.

The X-ray has not so far proved beneficial in the treatment of these cases.

The plan first suggested relieves pain in the majority of cases. When the plan is contraindicated, it becomes necessary to combat pain with anodynes. Opium in some form is most effective, but should not be used in the first stages, as it will be more needed in the latter ones. The coal tar derivation, hyœgamus, belladona, stramonium, or heroin can be given. When opium is essential, it should be given by the physician hypodermatically.

The tendency to alarming hemorrhage in the latter stages can be overcome by packing the vagina with iodoform gauze wrung out in a saturated solution of hot alum water.

The ordor can be obviated to some degree by douches of 2 per cent. solution of thymol, or a solution of permanganate of potash.

Careful hygiene, nutritious food and keep the patient out of bed as long as posible.

No reliable evidence of the benefit of the various serums advocated for these troubles has been presented.

Sterilty.

The senior obstetric physician of Guy's Hospital, Dr. Peter Horrocks, publishes in *The Lancet,* of January 9, 1904, a lecture delivered by him before the Medical Graduates College.

The lecture is an extremely valuable one, and concludes with a careful outline of treatment, from which we take the following points:

1. No *treatment* if the woman is healthy and has not been married three years. The chance of pregnancy is still good.

2. *Food and Exercise.*—Spare diet; plenty of work or exercise; change of diet.

3. *Tonics.*—Use these freely to improve the general health.

4. *Change of Environment and Climate.*—Send to a warm climate—*e. g.,* Cornwall, Devon, Malta, Italy, etc. Send back to her old home, etc.

5. *Specifics.*—In case of doubt give mercury or potassium iodide.

6. *Local Treatment.*—Cure any excoriation, pruitus, etc. Remove caruncles, repair lacerations. Cure vaginitis, urethritis, endocervitis, etc.

7. *Regulation of Coitus.*—Forbid excess.

8. *Natural Habits.*—Stop douching, etc.

Forcible Dilation of the Uterus.

McIlwrath (*Can. Pract. and Rev.*)

Two main points to consider—when and how to dilate.

"For the purpose of methodical description I shall refer to three classes of labor in which dilation may be practiced with advantage:

1. In those labors which do not differ greatly from the normal except in the matter of time limit, or where an abnormal presentation is associated with slow dilatation; or where the waters escape before dilatation is accomplished; or where the liquor amnii is scanty from the start, giving rise to "dry labor."

In all these conditions the patient's constitution and uterus may be perfectly normal.

2. When dilatation is not so much a matter of choice as of necessity.

In these cases the patient or her uterus, or both, are generally in a distinctly pathological condition, and the consequences of either action or inaction are much more momentous."

Abnormal presentations and early escape of the waters often demand artificial dilatation. Various forms of dilators have been proposed. All rubber appliances are hard to keep; apt to be out of order when needed; difficult to sterilize; displace the presenting parts, and if traction is made upon them, apt to lacerate the cervix. Gradual dilatatio in the first class by the fingers, as advocated by Harris, is to be preferred.

In the second class, ecclamtic women, concealed hemorrhage, etc., the situation is more serious. Grave results often follow operations and forcible dilatation helps to bring these on. For these branched metal dilators have been advocated, especially for rapid delivery. They are powerful instruments but dangerous ones. Deep cervical incisions are not suited for general use. In these too, dilatation can nearly always be accomplished by the Harris method. The skilled fingers can recognize a commencing laceration and desist before too late.

In slow dilatation of premature labors —fourth to eight month—apply 5 per cent. solution of cocaine on cotton to the os. In inevitable or incomplete abortion, pack the cervical canal and vagina with iodoform gauze, if sepsis has already set in better dilate and

empty the uterus, and this sometimes requires metal dilators.

Early interference is insisted upon in "dry" labors; aid should not be withheld longer than three or four hours.

Puerperal Infection and its Present Day Treatment.

Meek, in *Canadian Pract. and Review.*

Puerperal infection is the same as general infection, except for the altered condition in the puerperal state. The most familiar micro-organisms causing infection are the streptococcus, staphylococcus, colon-bacillus, gonococcus and the saphoprytic. These, with rare exceptions gain admittance from without the system. The streptococcus constitutes 25 per cent. of all cases of infection and is the only one (except in rare instances) attended by a mortality. Prophylactic treatment is essential and if fully carried out infection will become almost unknown. The same care should be exercised in preparing, treating and after nursing a case of labor as the surgeon uses in the operation. No vaginal injections should be used prior to labor, if the secretions are of normal acidity. Very few examinations should be made and these with sterilized gloves, and if the labor has been conducted aseptically, no post-partum douches is needed. In case of fever after labor examine the vulva pad for the caracter of the stains. Jellett says: "The stain produced by normal lochia is red in the center and gradually fades away, becoming lighter in color as it approaches the outer margin of the stain. In putrescent lochia, it produces a hard deeply stained edge, and becomes lighter towards the center. If putrescent further examination under most rigid antiseptic and aseptic precautions should be made, from below upward. Offending material, if found should be moved by irrigations with salt solution or 1 per cent. lysol assisted by finger or blunt curette, then gently packed with sterilized 5 per cent. iodoform gauze, a formalin solution which may be left 12 to 24 hours. Entrance to the uterine cavity is dangerous and should be avoided unless it is certain that these offending material retained, and then under rigid aseptic precautions. If there is not already infection, there is danger of carrying infected material into the cavity by our interference. The mortality of streptococcus cases is 5 per cent., and the morbidity is large in chronic invalidism from changes due to the infection.

Pryor claims a lessened mortality and morbidity by (a) cleansing under anesthesia; (b) curreting, irrigations and packing with sterilized iodoform gauze; (c) free incisions into the cul de sac posterior to cervix and packing to brim with 5 per cent. sterilized iodoform gauze.

He claims that the nascent iodine is rapidly absorbed and cuts short the infection. This, the author holds, should not be experimented with outside of well conducted hospitals.

General Tretament.—Keep the bowels open with calomel and salines; a diet of concentrated liquids; whiskey; quinine for fever, and strychnia to support the heart.

Antistreptococcus is of no use in acute stage—later it may be of service.

Posture During Narcosis.

(Editorial *Cour. Med.*)

Too little attention is given by surgeons to the effect of posture on the possibility of accidents during narcosis. The danger of placing the patient in the upright position when in deep narcosis has been repeatedly pointed out,

although we are not aware that any definite experiments have been made to determine the relative danger of the upright and the recumbent posture. Jayle (*La Presse Med.*, September 16, 1903) emphasizes the dangers of the Trendelenburg position during abdominal operations. He argues that the pressure of the viscera on the diaphragm and right side of heart will put an extra strain on the latter organ and may cause sudden heart failure. Moreover, he finds greater danger of secondary hemorrhage in operations on the pelvic organs, as these organs are depleted by gravity. Finally, he believes that air may be caught in the abdominal cavity, which may give rise to a painful subcutaneous emphysema. These warnings certainly need more attention.

Circumcision of Infants.

Harlow (*Med. Rev.*)

As a sacred rite of the Hebrews circumcision should be respected, but from a medical view it has nothing to recommend it. The double flap of the foreskin is a protection to the numerous neruipapillæ of the glans. Phimosis causes inconvenience, and tends to produce epithelioma or surface cancer, yet it is known that connection has been complete in this condition. Premature excitement is caused by the exposure of the glans. There is possibility of irritating collections occurring beneath the prepuce until maturity, and not then until the semen has been called out and allowed to set back under the skin, The foreskin is protection from injury and a guard against many excitements of the organ. Self-abuse can be accomplished without the foreskin, and excretions are as easily produced. Let the operations be performed only upon adults, and with their own consent, and when it is a necessity.

(We endorse most of the above, but still think there are many cases where it is imperative that the operation be performed in infancy...Editor.)

Prevention of Heart Disease.

Bullock (*Medicine*) says that no departmentment of medicine has derived more benefit from bacteriological investigations than preventive medicines. This is usually applied to the suppression of epidemics, and not enough attention given to other fields. Acute inflammations of the heart are of infectious origin. Rheumatism, the source of most of these troubles, may some day be checked, if not prevented, and the heart can be protected to a large extent. The tonsils are recognized as the way of infection in these cases, and should be vigorously attacked in every case of inflammation. No chronically diseased tonsil should be allowed to remain to jeopardize the heart in later years. Other infectious diseases that bring acute heart trouble, and while these may not be prevented, the organ can be assisted in withstanding the disastrous effects of the invasion.

Degenerative processes are preventable to only a limited extent, but these may be prevented from becoming incompetent.

The poisons of syphilis, alcohol, lead gout, etc., require appropriate treatment, and rigid attention to diet, as prophylaxis in degenerative heart trouble. Patients should be cautioned against a too strenuous life, high pressure, long business hours, no relaxation, and excessive eating.

Fatty heart is one that is inadequate to maintain circulation in the huge bulk of tissue. It is hard to treat, and the diet and sedentary habits should receive attention before the dangerous point is

reached. The heart is overstrained in excessive physical exercise in athletics, mountain climbing, and business energy, and it is the physician's duty to caution against them.

A person with heart disease should not be doomed to death. A damaged heart may yet be a very good pump. Repair the best possible and instruct the patient as to the best way of protection against further damage.

Obtaining Sputum in Children.

Finlay, of Glasgow, has observed the difficulty in obtaining sputum from young children for purposes of examination, and gives (*Archives of Pediatrics*) a simple method of procedure in such cases. With a piece of gauze on the forefinger, the pharynx, and especially the epiglottis, is irritated so as to induce coughing and any expectoration that is coughed up is swept out of the mouth with the finger before it has time to be swallowed. The quality thus gotten varies, but as a rule is sufficient for bacteriological examination. Several attempts may require to be made; but even in children as young as six months sufficient has been gotten on which to found a diagnosis.

What Ought We to Expect From Cardiac Drugs in Heart Weakness.

O. T. Osborne (*Med. News-Med. Record*) describes a cardiac tonic as a drug that will more or less permanently strengthen the heart and pulse, and leave the heart in better condition than it was before the action. A cardiac stimulant, on the other hand, is a drug which will stimulate, and perhaps for a short time strengthen a weak heart, but when its action is ceased the heart is left really in poorer condition than before, unless the cause of the weakness for which it is given has ceased to act. The principal cardiac tonic is digitalis, while the drugs which resemble digitalis in their action are strophantus, sparteine, cactus, convallaria, adonidine, and last but not least, suprarenal preparations. Stimulating cardiac tonics are strychnine and caffeine, while the cardiac stimulants are alcohol, ammonia, camphor, nitrite of amyl, nitroglycerin, and ether. Digitalis should be used in broken compensation in valvular disease, in simple dilatation, in the irritable weak heart of nicotine poisoning, in strained heart from overwork, over-athletic exercise, etc., also in cases of poor vasomotor tone, and when there is œdema or exudations with no serious kidney lesions. The action of digitalis in slowing the heart by its action on the pneumogastric nerve gives the heart a much needed rest, and the action on the cardiac muscle making the contractions more effective and more complete, thus acts as regulated calisthenic exercise, and the cardaic muscle is increased in thickness and strength. The contra-indications to the use of digitalis are a high tension of the arteries, atheroma, a weak cardiac muscle from prolonged fevers or from fatty degeneration, myocarditis, and, ordinarily, a serious kidney lesion. The best substitute for this drug is strophanthus. As a cerebral stimulant probably no drug equals caffeine. Coffee plus tobacco enables one to do an immense amount of brain work. If this is kept up long neurasthenia will supervene. The exact action of alcohol on the heart is not absolutely proved. Overdoses after absorption are depressant to the heart muscle, to the muscle of the blood vessels, and to the vasomotor center in the medulla. To combat continuous or persistent cardiac failure or depression, alcohol is the poorest stimulant that can be used, and if much is given the treatment is vicious.

In serious feverish conditions undoubtedly the narcotic effect of alcohol may be of advantage in quieting the patient, as mental worry and anxiety are great disturbers of the heart and circulation, and should be overcome by any legitimate means.

Hay Fever.

Henderson (*Canadian Pract. and Rev.*) gives a resume of some experiments of Dr. Dunbar, a German professor in the etiology of hay fever.

Dunbar's couclusions, after exhaustive study, are that it is caused by the pollen of grasses. He further claims that it is not by mechanical means or as an irritant that the pollen acts, but by a process of general poisoning. When the pollen is brought into water tears, nasal secretion, blood serum or physiological saline, the outer coat is ruptured and the irritant poison set free.

He was also able to isolate the active principle of the pollen that produced the symptoms of hay fever in predisposed persons at any period of the year, but not affecting normal individuals. Rabbits have been injected with this principal and a serum obtained that has a marked effect upon the disease as an antitoxin. The subject is still under investigation.

Adrenalin and Its Uses in General Surgery.

Under the above title an article appears in the *Indian Medical Gazette,* from the pen of Harry Gidney, F R. C. S. (Edin.), D. P. H. (Camb.), etc.

The author finds that the "clinical usefulness of Adrenalin is very great and extensive, and owing to its power of rapidly and effectively producing vasomotor constriction, it is adopted to the treatment of all inflammatory conditions. The drug is also of extreme value in arresting hemorrhage during all surgical operations. It is indicated whenever and wherever any local hyperæmia exists, more especially in inflammations of mucous surfaces, such as those of the eye, throat, larynx, pharynx, urethra, bladder, nose, rectum, vagina, uterus, stomach, etc. It is used not only to stay hemorrhage when it exists, but also as a preventive or controlling remedy, given either internally or externally prior to an operation, so as to lessen the amount of bleeding during the performance of that operation. It is a non-irritant to mucous membrane unless when used too frequently and in excess.

"On reading the literature on the subject," says the writer, "I find that Adrenalin is admitted to be the most powerful and rapid cardiac stimulant and tonic we have, being chiefly used in cardaic affections, hæmatemesis, hemoptysis, hemophilia, hematuria, menorrhagia, post-partum hemorrhage, purpura, scurvy, etc. It is said to be the most rapid restorative in chloroform and other forms of anesthetic syncope, and in such cases it is advisable to administer it intravenously."

The author reports the results of several operations, major and minor, in which Adrenalin was employed.

The first case was one of fracture of the vertex of the skull. As one of the larger branches of the middle meningeal artery had been torn there was profuse dural hemorrhage and capillary oozing, which were controlled by the use of the 1-1,000 solution. In the second case, one of hemorrhoids, profuse bleeding was checked by the rectal insertion of a plug of cotton wool soaked with Adrenalin chloride solution.

The third case was one of skin grafting, in which the author tried pressure

to stop the capiliary bleeding. As the procedure was somewhat tedious he applied Adrenalin chloride solution with almost immediate cessation of all oozing, and what is usually a lengthy and sanguinary operation was converted into a short and comparatively bloodless one.

The fourth case, one of hemorrhage after the extraction of teeth, and the fifth, which appears to embrace the author's experience in a number of cases of epistaxis, afforded additional opportunity to test the hemostatic effect of Adrenalin.

In case six a post-partum hemorrhage was checked by swabbing the uterine cavity with Adrenalin solution, while the same happy result was obtained in a case of secondary hemorrhage following an operation for the relief of a mammary abscess.

The author has found that the instillation of a 1-5,000 to 1-2,000 solution of this drug reduces the inflammation and considerbaly cuts short the process of conjunctivitis. He usually applies it (diluted) over the inflamed parts by means of a soft camel's hair brush. He always uses the preparation containing chloretone, which is a decided local anæsthetic relieving much of the photophobia and pain. He is fully convinced of the power of adrenalin to arrest or lessen the bleeding that arises from the cut ends of the iris after iridectomy. He speaks highly of its efficiency in chemosis, cataract operations, evisceration of the eyeball, operations for ectropion, symblepharon and trachomatous pannus.

The author concludes that in all cases of minor surgery, in which it is desired to arrest bleeding from any cut or exposed surface, we have in Adrenalin a most useful, powerful and rapid drug, one that is non-poisonous, non-irritant and non-accumulative, especially in operations upon the conjunctiva and eyelids.

A Plea For Unification and Uniform Organization.

J. N. McCormick, in *Journal American Medical Association,* states that the County and State Medical Societies should be organized acocrding to the plan of the American Medical Association, for the following reasons, viz.:

1. That the existing professional conditions and estrangements are useless and senseless; that they are hurtful almost beyond calculation to both the profession and the public welfare, and that they are remediable.

2. That the plan of organization is based on our system of civil government; that it was prepared with much care and unselfishness, and that it contains nothing untried, experimental or impracticable.

3. That the county society is not only the unit of the organization, but the source of all authority and power in both the State and National bodies through a representative delegate system, and it is also the only portal of entry to the entire society system.

4. That coincident membership has been an old and perfectly satisfactory method in many States, is essential to complete organization, and that it is just and right. It would be as unfair to permit a physician to become a member of his county society and enjoy all the benefits arising from the labors of the State society, as to permit one to become a citizen of Ithaca or Troy without becoming a citizen of the State of New York, and bearing the burdens and responsibilities of the same.

5. That amendment of any part of the plan is purposely made easy and is controlled by delegates from, and responsi-

ble alone to, the county societies.

6. That the time has come for unification, and that, while union under a defective plan, which the joint body could modify and improve for the common good, would be far preferable to to a continuation of existing conditions, that now proposed has been found excellent and practical after full trial in other States, and having been prepared away from New York contentions and controversies, it offers a basis for compromise, honorable alike to both factions and neutrals.

The Mortality of Appendicitis.

Frederick S. Dennis (*Medical News*) states that the operative technique can be but little improved upon in its present state of perfection. That it would seem that surgery had reached its climax in regard to mortality in operation, yet the time will never come when there will be no death rate, for complications are certain to arise that are beyond the control of the sugeon. With a view of possibly further reducing the small mortality, it seems now the only thing that is left is to combine the various views of experienced surgeons into some uniform plan of treatment in order to obtain the best results. There is no difference of opinion in regard to the advisability of operation, where the attacks have been multiple, in diffuse peritonitis, or in abscess cases. In catarrhal appendicitis some surgeons council immediate operation in all cases; other surgeons counsel delay, if the attack is mild, with the expectation of removing the appendix in the interval.

Interval operations have practically no mortality; operations during an attack, even though early, have been attended by some mortality. As to which of these two plans to pursue in all cases, it seems that the only safe plan is to decide each case upon its merits.

The mortality of appendicitis in all cases under medical treatment is about 16 per cent., with 30 per cent. of relapses, while in diffuse suppurative peritonitis, it is almost uniformly fatal. The mortality of appendicitis in all cases under surgical treatment is about 4 per cent., and with no relapses, and in diffuse suppurative peritonitis, the mortality is from 31 to 91 per cent.

He comes to the conclusion after studying all available statistics, and comparing them with his own that any case after thirty-six hours that is not improving in every way, should be operated upon at once, since Fowler has demonstrated that operation in forty-eight hours in 127 cases 83 per cent. recovered. When the cases were left to the fourth day there were 60 per cent. recoveries, to the fifth and sixth day, 58 per cent.; to the seventh and eighth day, 50 per cent., and to the ninth to tenth day, 33 per cent. The value of the early operation depending upon the condition of the patient in forty-eight hours after the onset of the attack is thus obvious. The results would be still better if the operation were performed within thirty-six hours. Now let us suppose the simple case is not operated upon at the end of thirty-six hours; but is left to recover without operation. If this type of case is now operated upon, say a month after the attack, the recoveries, debarring accident, ought to be 100 per cent. This line of practice seems to yield the best results and is extremely radical under certain conditions and quite conservative under other conditions. This plan of allowing the simple catarrhal cases which are doing well after thirty-six hours to recover without immediate operation, and relegating them subsequently to the group known as interval cases, and the prompt

operation after thirty-six hours when the cases are not doing well, seems to hold out the best prospects of recovery. The pendulum has swung too far toward indiscriminate operation, but now the introduction of the interval operation has brought the pendulum back to swing within the proper limits. There are some cases where the surgeon ought not to wait even thirty-six hours, but operate at once; it may be within twelve hours after the onset of the disease. These cases are rare; but they occasionally occur and in this type of the disease no time must be lost to save the patient, since early operation is the only salvation. If a rule is laid down which applies to the surgeon to operate in all cases immediately, this rule would be inapplicable in country practice, to the family physician. Morris states that "a surgical death rate of 2 per cent. is illegitimate in cases operated upon in the first attack, before infection has extended beyond the confines of the appendix." Such a statement is misleading because there is bound to be, and there always will be unavoidable complications.

A Consideration of the Efficiency of Antitoxine in the Treatment of Diphtheria.

The report of J. D. Craig (*Albany Medical Annuals*) is based upon a study of 1,182 cases of diphtheria, reported to the Department of Health of the City of Albany, N. Y., from January 1, 1901, to December 1, 1903.

He states that the original investigations of Berhing, Roax and Aronson, proving the potency of the use of antitoxin for the cure of diphtheria, were made about the years 1891-1892; that it was a number of years before public confidence was established. At first, the strength of the various preparations was very uncertani, follow the standardizing of the antitoxin and the adoption of a universal unit, togther with concentration of the antitoxin in a minimum quantity of serum, and improvement in other ways, came the practical disappearance of the various skin and other phenomena associated with the introduction of this remedial measure. Of the 1,182 cases there were 84 deaths; 980 of these were given antitoxin with 49 deaths, 202 were not given antitoxin with 35 deaths. Of the 49 deaths after the use of antitoxin, in most cases, the antitoxin had been given as a last resort; in only three cases was it used early. He draws the following conclusions:

First, that the use of antitoxin is increasing, and is generally accepted as a valuable therapeutic agent by the medical profession.

Second, that the medical profession is using mature judgment in the selection of cases for the use of antitoxin, the milder cases being permitted to go on to recovery without the use of antitoxin, and the more severe cases, including the mixed infections, are given the benefit of protective inoculation.

Third, that the use of antitoxin has decidedly diminished the death rate and saved many lives.

Egg Skin Graft.—Smith (*Daily Med.*) has grafted twenty-seven square inches of wounded surface with the skin of egg shells, the part next to the shell being applied to the wounded surface. Further reports are needed, but he believes the skin will attach itself to the human body, and thus become a protection to the exposed parts.

Simplicity in Dealing With Abscesses of the Appendix.

Paul Y. Tupper (*American Journal of Surgery and Gynecology*) states that simple abscess around the appendix, the danger from operative treatment amounts to practically nothing if the surgeon merely opens the abscess and secures free drainage. That most operators claim this to be all they do in abscess Tupper states that in simple abscess around the appendix, the danger from operative treatment amounts to practically nothing if the surgeon merely opens the abscess and secures free drainage. That most operators claim this to be all they do in abscess cases, but when it comes to execution they are tempted to do something else—and in their zeal they compromise, if they do not sacrifice, the life of the patient. That the removal of the appendix not only is not indicated but the slightest search for it is unwarrantable. That in the large majority of cases where an abscess forms, the appendix has sloughed off and is no longer a menace to the patient's future health. That it is a waste of time and a risk to wash out the abscess. The method that he follows is to open the abscess in the most direct way, the greatest care bein taken to avoid the peritoneal cavity. A finger is inserted into the bottom of the cavity and a guaze drain is then inserted with the finger for a guide. The ends of the gauze are left hanging from the wound, and a moist dressing under rubber protection is applied. He states that he has never had to operate the second time for the removal of the appendix or its stump.

General Paresis.

Aiken (*West. Med. Rev.*) says Dr. Bell, of McLean Asylum was the first (in 1843) to fully recognize and describe this disease in America. Now the ratio as given in asylum reports give the percentage of all cases received as 8 to 12 in America, and 12 to 15 in Europe. Males are four or five times as susceptible as females, and cities furnish a larger ratio than do country districts. Professional, business men, and artisans contribute liberally to the contingency of general paresis. Syphilis is given as a caunse, but not the only one. 88 per cent. of children with paresis inherited syphillis, 50 per cent. showed chronic alcoholism in one or both parents. It is a manufactured disease. C. L. Dana's reciepe for acquiring paresis is: "Let a man of nervous constitution acquire syphillis between the ages of 20 and 30 years; then let him work as hard as possible under great mental strain, drink a great deal of alcohol and indulge excessively sexually. This will pretty surely bring on paresis in ten to fifteen years."

Many facts are given to prove that it is a disease of civilization and syphilization, especially the former. It is comparatively unknown except in highly civilized nations. Non-syphilitic and non-alcoholic brains are 16 to 20 times less vulnerable than syphilitic and alcoholic brains. The increase of paresis among females is largely among prostitutes, where the use of alcohol is the rule. The increasing ratio of paresis without a positive increase of syphilis may be attributed to an increase of almay be attributed to an increased consumption of alcohol, or to the use of more poisonous kinds of drugs and beverages.

The course of the disease is over a period of two to five years, and is well defined as a case of pneumonia. Unusual cerebral activity, with increased irritability, expressions of possessing

mental and physical superiority over one's fellowman, or conversely the manifestation of self-complacency, reticence of speech, and a despondent bearing, alternating with days of mental and motor restlessness not due to some drug should cause a suspicion of the early stages of paresis. A drunken man's grandiose ideas cease when free from alcohol and he has not the speech difficulty and paralysis of pareses. Indulgence in excessive venery, utter shamelessness and periodic excessive use of alcohol in a sturdily upright and moral man are indicative of general paresis. Homicidal impulses are sometimes suddenly developed. The constant introduction in conversation of new and unrelated subjects is very characteristic of paresis. Reckless and questionable business transactions in a previously conservative business man should be sufficient to place the physician on guard. Abstract reasoning and memory for recent events are minus faculties in a paretic.

Mental infeeblement is progressive, speech becomes stuttering and thick, the tongue is tremulous, and the hands incapable of co-ordinate movements in writing, though he boasts of his excellent penmanship. Omission of letters in spoken or written language is often very noticeable. The facies show an absence of intelligent mental cerebration directing the muscular movements. The pupils react badly to light and are always uneven. The sexual desire may continue strong, but function gradually weakens. Bladder power is weakened. Insomnia is the rule. Delusions are contsant and ever-changing. Dementia deepens while the speech disturbance, tremor and muscular weakness progresses till death closes the scene.

It is only in the earlier stages of paresis that the erroneous diagnosis of neurasthenia is possible. The neurasthenia believes he is sick, gives a clear account of all his complaints, remembers those he did have and daily finds new symptoms, eats poorly, and has a multitude of digestive disorders. A paretic never thinks he is sick, denies every suggestion that he does not sleep well or is nervous or tired out and should rest, eats heartily, boasts of his digestive powers, but does not assimilate and gradually decreases in mental and motor power.

Uneven pupil, caused by paralysis of the motor fibers of the iris, is more common in paresis than all other firms of insanity combined.

The drug treatment of paresis is only palliative. Antisyphilitic medication is futile if it does not actually hasten the degenerative process. Early hospital treatment is imperatively demanded, if for no other reason than the patient's comfort, and protection of family and friends from bankruptcy, moral disgrace and the homicidal impulses of the patient.

The Early Manipulations of Cirrhosis of the Liver Previous to the Appearance of Physical Signs.

(Univ. Penn. Med. Bulletin.)

Charles G. Stockton states that of the common forms of cirrhosis, called atrophic and the less common, the hypertrophic, is generally said that the earlier symptoms correspond with the symptoms which usually accompany an ordinary hyperaenia or congestion of the liver. That it is stated that the patients suffer from flatulence and general disturbance in digestion, both gastric and intestinal, have a capricious appetite, irregularity of the bowels, and that the evacuations show a deficiency of bile, that they have a flabby, heavily coated tongue and a disagreeable breath, their

muscles are flabby, they have a muddy complexion and their cutaneous capillaries are dilated. That this group of symptoms, together with an irritable nervous system and perhaps a subicteric tint in the integument and the conjunctivae, is what the diagnosis of probable cirrhosis is based upon. He states that a chronic alcoholic may have all of the above symptoms and in addition have an enlarged and tender liver and after several months treatment all of the symptoms may disappear. That in order to reach any definite conclusions it must be from the early study of those cases of hepatic cirrhosis which occur in the non-alcoholic. He reports two such cases, one, of whom is alive and has an extremely small liver, yet if he exercises care in eating suffers little inconvenience, the other was a man who considered himself healthy, except for occasional attacks of billiousness. He died from ruptured varicose vein of the oesophagus ,and autopsy revealed a marked cirrhosis. He concludes that there seems to be no positive data from a clinical standpoint upon which a developing hepatic cirrhosis could be predicted.

Blood Pressure in Surgery and Treatment of Surgical Shock.

In an editorial article in the *Annals of Surgery* Dr. Lewis A. Pilcher discusses the prize essay by Dr. Crile. The essay is the result of elaborate experimental research into surgical shock. Dr. Crile makes a distinction between the immediate sudden depression which may result from cardiac failure, from hemorrhage, or from injuries of the vasomoter centre, and the more gradually developed depression which is due to the exhaustion of the vasomotor mechanism; impaired cardiac and respiratory action, hemorrhage, anæsthesia, temperature, may all contribute in some degree to the final result; but the important thing is the vasomotor breakdown from overstimulation. To the first condition he applies the term collapse, which is a suspension of function rather than an exhaustion of centres, while *shock* is only applied to the second condition.

The author very justly remarks that there seems to but a limited range of possibilities for heart stimulants in surgical shock, that stimulants acting upon the vasomotor, the cardiac, and other centers of the medulla are, on the whole, either inert or harmful. Alcohol, nitroglycerine, amyl nitrite, strychnine and digitalis were all found to increase the rapidity of the decline in animals in deep shock. It was found that adrenalin administered by a continuous intravenous injection in salt solution in strength of from 1 to 50,000 to 100,000 did good. The same may be said of saline infusion, but their range of usefulness is limited. The author has devised a "pneumatic suit" with which to apply pressure to the extremities and abdomen, and which was found to be of value in repeated instances. Morphine administered previous to infliction of traumatism, he finds, lessens the animals, susceptibility and therefore makes possible more extensive operations and procedures over a longer period of time.

Dr. Pitcher states that Dr. Crile seems to have overlooked the relation of temperature to shock, and quotes from a recent experimenter that "temperature commands the first place by

its power of production, by its power of limitation, and by its power amelioration of the composite condition, shock." He states that it is obvious that in ordinary surgical work "pneumatic suits" are out of the question, while continuous infusion of adrenalin solution are possible only in laboratory conditions; that if surgeons must abandon such time-honored agents as alcohol and strychnine, digitalis and nitroglycerine, in the treatment of shock, it will be a satisfaction to know that heat and friction are left to them.

Etiology of Acute Articular Rheumatism.

(*Journal American Medical Association,* Nov. 14).—In discussing the recent articles by Beaton and Walker, in which they describe a "Micrococcus Rheumaticus" the *Journal American Medical Association* states in an editorial that it has long been held that acute articular rheumatism is an infectious disease, but no positive proof has been furnished. The basis for this belief includes the folllowing clinical observations:

1. Rheumatic fever occurs in epidemics.

2. There is a great constancy in the seasonal variations.

3. There is a striking similarity of the symptoms of rheumatic fever to those of septic infections.

A great deal of bacteriological investigation has been done. The pyogenic cocci have been repeatedly isolated from the heart valves and blood of patients who succumbed to acute articular rheumatism, chorea and malignant endocarditis. The "micrococcus rheumatism" cannot be differentiated culturally from the pyogenic streptococci but differs in several reactions, producing large quantities of prussic acid. All streptococci are said to produce prussic acid, and when we consider that the toxin-producing powers varies within wide limits, we would not be surprised to find that the acid-producing power is different under different conditions. Therefore, it seems, we are not yet justified in speaking of a specific "micrococcus rheumaticus."

Medical Treatment of Gall Stones.

H. Richardson states (*Therapeutic Gazette,* Nov.) that while the formation of gall-stones is still unsettled, cholesterine gall-stones appear to be the result of an infection, producing an inflammation of the walls of the gall-bladder, and a reduction in the total solids of the bile, especially the bile acids, with an increaese of cholesterine. As the bile acids are reabsorbed from the intestinal tract, a very small quantity is necessary to keep up the required quantity, under normal conditions, to hold the cholesterine and bile pigments in solution. That it seems improbable that the bile acids should be formed in the gall-bladder, it being more likely that they are formed in the liver or blood, and it is possible that the newly formed acids are excreted into the gall-bladder from its mucus membrane. If this were so inflammation of the gall-bladder would lessen the amount excreted, only that which was reabsorbed from the intestines being available, and that this would gradually increase in quantity.

That gall-stones introduced into the bladders of healthy dogs without producing cholecystitis were absorbed; if cholecystitis were produced they were not absorbed. From these experiments he states that it was evident that by the administration of glycocholate of soda, which will be absorbed from the

intestines entering the gall-bladder from the liver as glycocholic acid, it must be possible to dissolve gall-stones in the bladder. That even when cholecystitis is present glycocholate of soda is indicated not only as a prophylatic but as a solven for stones already present, and in those cases only in which there is an occlusion of the gall duct is surgical interference permissible.

Intracural Injection of Osmic Acid for Supraorbital Tic.—Dr. Robert Abbe read a paper on this subject before the Practitioners' Society of New York. The patient was a young man who had already been shown at the previous meeting of the society. He was then suffering from a severe form of facial tic, limited to the supraorbital branch of the fifth nerve. Since then Dr. Abbe had operated on him as follows: Under local cocaine anæsthesia an incision was made beneath the eyebrow and all the fibers of the supraorbital nerve isolated at the supraorbital foramen. This bundle of nerve fibers was then elevated and thoroughly infiltrated with a 1½ per cent. solution of osmic acid, the slight excess being wiped up immediately after the injection. The operation caused very little pain. On the day following, the painful tic occurred about fifteen times, as compared with forty to sixty shocks daily before operation. On the second day it occurred eight times, on the third day five times, and on the fourth day three times. On the fifth and subsequent days it did not occur at all, and with the exception of a slight, passing flutter of the nerve fibers on one occasion, the patient had remained entirely free from pain since. The operation, which was done on November 4, had resulted in partial anæsthesia of the scalp, which still persisted. The cornea and conjunctiva were not affected. The patient had resumed his occupation as a clothing salesman, which the facial tic had compelled him to give up. In reply to a question as to whether the relief would be permanent, Dr. Abbe said he did not know. In some of the cases on record the pain had not returned after several years.—*Medical Record.*

A Cosmetic Operation for Inguinal Hernia in Women.—It is always well to have a cosmetic effect in mind in surgical operations, provided no added difficulty or danger is incurred in striving for it. Morestin (*Bulletins et memoires de la Societe anatomique de Paris,* lxxvii, 6me serie, No. 3; *Zentralblatt fur chirugie,* November 7th) endeavors to hide the scar of the operation for inguinal hernia in women by making the incision in the region covered by the public hair, the wound being dragged outward with a retractor. This seems a refinement of the cosmetic art, for what woman would care if she had a linear inguinal scar visible on close inspection.—*New York and Philadelphia Medical Journal.*

The Microscope.—If the clinical history and naked-eye appearance on fresh section indicate that the growth is malignant, but under the microscope the growth appears innocent, I regard the growth as malignant. If the macroscopical appearances are innocent, but the microscopical appearances malignant, I regard the growth as innocent. In other words, when the clinical and microscopical appearances differ, I base my judgment upon clinical history and macroscopical appearance on fresh section because I have found them more reliable.—*C. Hamilton Whiteford.*

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., APRIL, 1904. No. 4

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

Diphtheria Antitoxin.

The use of antitoxin as a remedy in diphtheria is no longer an experiment, but is an acknowledged remedy, and its use advocated by the large majority of the teachers of the day.

While this is true there are many points connected with its use that are yet in controversy. For a long while the dose of the remedy was 500 to 1,000 units, and this is considered by many physicians as a sufficient dose even now. Recent investigations and experiments have demonstrated the fact that larger doses reduce the mortality in severe epidemics. This has been very forcibly exemplified in the statistics of English hospital practice. The English doctors claim that their lesser mortality is due, saving the advanced and almost moribund cases, to heroic doses of the antitoxin. The administration of 6,000 to 10,000 units is not unusual in hospital practice with them, and in extra severe cases as much as 20,000 units have been given, in twenty-four hours, with gratifying results. The size of the dose should bear some ratio to the duration of the disease and the severity of the symptoms, *i. e.* at the onset of the disease, with mild symptoms an ordinary dose of 1,000 units may immunize the patient, to be followed by recovery. Later, in time, when the symptoms are more severe larger doses will be required. It is by recognizing the fact that dangerous cases require heroic doses, that the English physicians get the better results. They have faith in the antitoxin, and use it on seemingly hopeless cases.

Gidney *(Pediatrics,* March, 1900) says in concluding an article on the treatment of diphtheria, that there is "little fear of administering an overdose. * * * * We may say that if patients and medical men did their duty, the former in calling assistance early, the latter in administering the remedy early, and in sufficient doses, the death rate from diphtheria might be reduced to a small fraction of what it is at present. * * * * Indeed, with necessary qualifications, we may say that very few children ought to die from diphtheria."

In speaking of the use of antitoxin in

the Boston City Hospital, Gidney says: "Dr. J. H. McCollom, resident physician of that institution, states that the low mortality of the past year is due to the extremely large doses of antitoxin in the very severe cases."

Also—

"The most surprising and convincing evidence comes from Chicago, where 2,468 cases were treated, with a mortality of 6.4 per cent.; and 1,112 cases injected during the first three days, but 2.5 per cent. died."

Another fact not as well recognized as it should be is the importance of the early administration of the remedy. The earlier the less is required and the more certain its action. In sporadic and isolated cases, there may be an element of doubt as to diagnosis, and the first day or two may pass without the use of antitoxin. In the midst of epidemics a sore throat with fever would call for its use at once.

This brings us to another phase of the question—that of checking the spread of an epidemic by immunizing the material. We can hardly overestimate the importance of prophylaxis in any case, and with diphtheria it is especially desirable that its spread should be prevented. While this question is still undecided, it is evident from some recently published observations that much can be done towards rendering children of susceptible age immune by the timely and persistent use of antitoxin. Unfortunately the period of remaining immune is very short, still it can be made of benefit in checking an epidemic.

Among contributions on the immunization of those exposed to contagion against diphtheria, J. S. A. Gramham, of Toronto, has written a very valuable paper on the systematic use of antitoxin as a prophylactic measure. (*Canadian Practitioner and Review,* December, 1903.) His observations, on which he bases the conclusions reached in term of the Hospital for Sick Children (Toronto). He has complete record of 1,065 injections in 384 patients. The hospital had not been clear of diphtheira for any length of time since its establishment. The injections were given every 21 days to all patients, and the results were very marked, in producing immunity from diphtheria. The doses administered were 250 units to children of three years old and under, and 500 units to all over three years old. During the first six months of systematic use of antitoxin in the hospital, not a single case occurred, and during the second six months there were eight cases which are explained and do not impair the usefulness of the remedy. A nurse cleaned up the postmortum room before it was fumigated, and contracted diphtheria four days later, but none of the children of the ward—the baby ward—were affected. Dr. Wright one of the attending physicians, went about the ward a week with a nasal diphtheria, before it was diagnosed as such, yet no child developed diphtheria. The rashes, local manifestations and constitutional effects are noticed by Dr. Graham. The paper is very complete, and the administration of antitoxin as a preventative is fully endorsed by its author.

In the use of diphtheria antitoxin it is well to keep these ideas prominently before us: (*a*) The early administration of the remedy saves the larger number of patients; (*b*) heroic doses will sometimes reach the worst class of patients, and (*c*) the systematic use of the remedy prevents the spread of the disease.

The Medical Profession From a Layman's View Standpoint.

We believe in the dignity of the medical professsion, or perhaps we should say in the study and practice of medicine as a profession, and in the columns of the journal contend for the preservation of this dignity in the individual personality of its members.

In this strenuous age commercialism in every department of life is rife, and is to some extent creeping into the ranks of the profession, it is essential that the bulwark of the profession's position and influence be well guarded. It is the philanthropic spirit of the profession that gives it dignity, and commercialism in any degree detracts from the high position bequeathed to the present generation through a long line of predecessors.

The public does not always recognize this position of the profession, and it is with pleasure we read in the February issue of *Frank Leslie's Magazine* an article from the pen of a layman, Arthur Goodrich, giving prominence to the philanthropy and unselfishness of doctors, and saying many complimentary things of them. He divides the profession into professional doctors, merchant doctors and quacks. It is the professional doctor, the one who works regardless of the fee, that holds the profession to its philanthropic ideal. It is this class that, individually and collectively, through societies and boards of health, is striving to benefit mankind in curtailing disease, and that, too, at rediculously small salaries.

The article in question is headed, "Does it *Pay* to be a Doctor?" The cost of a medical education is placed at four to six years hard study and an expenditure of near six thousand dollars in preparation and waiting for a practice with an income. The average annual income of the doctors of the present day is placed at seven hundred and fifty dollars, for a lot of very hard work. The reward comes in another way, according to the author—"Saving lives by quiet heroism, healing the sick, lengthening and lightening the days of many a chronic sufferer, daily deeds of kindness and charity, constant self-sacrificing service; these form a heritage that money can scarcely measure."

The following we copy from the editorial columns of the magazine:

"The article which we publish this month on the profession of surgery and medicine involuntarily provokes comparison with the ethics which govern other professions. How many schoolmasters would recommend that a boy be taken from them and sent to some other school, where the tecnique of teaching was more perfect? How many lawyers would tell a client to move on to some more experienced members of the bar? How many musicians would shun the notoriety of the newspapers? Yet this, and much more, is expected of every reputable practitioner of medicine and surgery. Of course the conditions are very different in every profession, but when all is said, the conservatism of doctors preserve them as a race apart. In their whole attitude toward commercialism, they still remain nearer to the clergy than to any other profession. Much honor to them."

The Daily Medical is a new publi ation for professional patronage in the way of literature. It is issued from 154 East 72nd Street, New York, and Dr. M. W. Curran is its editor. It is four pages, newspaper style, and contains medical news from all over the United States, and its editorials are timely and well written. Success to the venture.

Causes of Pneumonia.

The Health Department and the Health Commissioner of Chicago have issued a report on pneumonia. They claim pneumonia to be one of the most important and neglected causes of death." Pneumonia is incited by bacteria and exposure to cold, over-exertion, etc., are not the direct causes. The bacteria are lodged in the dust from sputum and nasal discharge. Its prevention is in—

1. Suppress the habit of spitting upon floors, pavements, etc.

2. In private houses, public conveyances, etc., the dust should not be removed by stirring it up and allowing it to settle in another place; feather brushes should be discarded and moist cloth used instead. The furnishings should be of bare wood, and this kept clean—carpets, curtains and upholstered chairs are deadly. Rooms thus furnished should be swept at night —rugs dusted in a damp atmosphere. Next morning the dust is easily removed by a damp cloth, and that is the end of it.

The Florida State Board of Health has adopted a regulation or rule against spitting on sidewalks, and on the floors and decks of public transportation carriers and in public buildings. This supports the antispitting ordinances of many towns and cities as a State Board of Health Regulation, until the habit is permanently prevented by legislative enactment.

Puerperal Eclampsia.

This subject has interested all practitioners during obstetrical work, and never more so than at present. Its etiology is specially discussed by Myer in *Journal of Medicine and Science.* He asserts that too much stress has been given symptomology. Eclampsia is a disease *per se* and not merely a symptom. Uremia and eclampsia were once considered the same, eclampsia being applied when it occurred in the pregnant woman, but this no longer tenable, for neither urea nor ammonium chloride, the toxins of uremia, are found in the blood of ecamptics, and eclampsia exists when neither the chemical nor pathological findings indicate kidney trouble. If the uremic condition was the cause we might expect a predisposition to eclampsia in all nephritic cases, but uremic persons seem in a measure to be immune.

Traube's theory of protracted loss of albumin through the urine, causing an hydremic condition of the blood and hypertrophy of the left heart, these producing an increase in the blood pressure of the arteries, brings on œdema, and secondarily, cerebral ænemia, with coma and convulsions. This theory has been applied to eclampsia by Rosenheim. who claims in pregnancy, a hydremia, hypertrophy and increased arterial pressure during labor pains. This assumes much that is not proven. Post-mortem examinations have shown hyperemia of the brain in these cases equally as often as ænemia.

The thory of an autointoxication due to the retention of toxic material in the blood has not been accepted, as the normal blood serum and thatof an eclamptic woman shows no appreciable difference. Compression and dilatation of the uterus once advanced to account for the convulsions cannot be considered as of importance, as the same condition is found in large ovarian tumors, and when the head has not yet entered the pelvic inlet.

Some French observers have advocated the liver as the etiological factor

in the production of the convulsions and coma, and on account of the frequent existence of icterus in eclampsia, they believe that the metabolic function or the order is disturbed through some pathological lesion, so that it permits substances taken up from the intestinal tract or from other sources in the organism to pass through it without undergoing the change necessary to render them harmless.

Schmurl demonstrated in twenty-three cases that the extent of the change in the liver did not go hand in hand with the frequency of the convulsions, and that the liver changes were not more pronounced than in other parenchytamous organs.

Other factors considered are the nervous system, and the increased excitability of the brain during labor, and these are probably secondary to some other cause, with no special etiological significance within themselves. The placenta was considered by Ahlfield as the source of the toxin, but no pathological lesion has been found which might be considered pathognomic of eclampsia.

Lastly the fœtus is considered as a factor and the following conclusions drawn:

"At the Gynecological Congress, in Geisson, in May, 1901, the subject of eclampsia was chosen as one of the principal themes. Fehling, who prepared the Referat for the occasion, presented the following:

'The fetus, having its own metabolism, produces substances which are carried into the maternal circulation through the placenta. If the excretory function of the mother is equal to the occasion, we note no bad effect; if, however, such is not the case, eclampsia is the result.'

Many investigators who had been experimenting along this line could confirm his views and at this congress they were well received.

Fehling (22) asks why, if the child is to be left entirely out of consideration, do we find this condition only during pregnancy, and why in almost every case is the mother relieved at once by delivery?

That the fetus has its own metabolism all are willing to concede, and that this increases toward the end of pregnancy, especially during the last two months, is certainly true. At once we have an explanation of why eclampsia rarely occurs during the early months. How are these poisons to be excreted unless through the maternal organism? We know that the excretory function of the kidneys of the child during intrauterine life is not sufficient. Ahlfeld (2) claims that the kidneys do not excrete at all during this stage. It seems, then, only natural that the excreta from the fetus should be disposed of through the maternal organism.

Dienst (20), who had occasion to make post-mortem examinations on three children from eclamtic mothers, found exactly the same lesions which have been found in the mothers, namely, cloudy swelling, degeneration, hemorrhage, and especially pronounced infarct building. Kœnig and Futh found that the blood of the mother and child showed the same osmotic pressure. These findings can be explained in only one way: There must be a continual interchange of chemical substances between mother and child, which make Fehling's view, that the toxin can come from the fetus, very plausible. Furthermore, the existence of the same pathological conditions in the fetus as in the mother shows that these changes, which have always been found in the parenchymatous organs of the eclamptic

and which have always been regarded as prime factors, need not necessarily be accepted as such. We have every reason to regard them as secondary to the toxin circulating in the blood. By accepting this as true, we do not assert that the condition of the maternal organism does not play a role in the development of eclampsia. The present theory accepts the view that the maternal organism is not excreting properly, but the cause of this need not be confined to any one organ. It is the retention of a small amount of toxin from the fetal organism which tends to bring about the changes in the different organs and then produces a further retention.

Dienst (14) has made some very interesting experiments. Two rabbits of equal weight were employed. The right kidney of each was extirpated, and one of the rabbits was at once permitted to become pregnant. The pregnant animal developed, after eighteen days, convulsions and died, while the other one remained perfectly normal. The post-mortem showed on the pregnant animal exactly the same changes as are found in the organs of an eclamptic. He found that he could bring about the same results much quicker in cases in which he produced an aortic insufficiency, and removed a portion of the liver in addition to extirpating the kidney. This shows, experimentally, at least, that there must be some interference with excretion in order for eclampsia to develop.

It is perfectly clear with this condition present, we would at the latter stages of pregnancy have the maternal organism poisoned by toxins from two sources. We have in this theory the means of explaining most of those conditions peculiar to eclampsia.

The most difficult question for solution is, why do we find the condition of primiparæ more often than in multiparæ? Would not a form of immunity explain this?

There are, of course many points to be further developed before we can accept the fetal theory, but it seems the most rational of those that have yet been offered."

The 1904 *meeting of the State Medical Society will he held in Raleigh on May* 24-26th.

This will be the first meeting after the adoption of the new constitution and, while the time has been too short to reach all the doctors in the State and enroll them in the county societies, such a goodly number have connected themselves with the local societies that the membership of the State Society will be largely increased, and we confidently expect a very large gathering of the profession in Raleigh. Over three-fourths of the counties have already been organized and we trust the others will "fall into line" this month or next and thus enable each county to be represented in the House of Delegates.

The physicians of North Carolina are an honorable body of men and in the bonding of themselves in a State Society they desire to increase their power for good—first to the people of the State they love, and second—to themselves. We need a revisal of our medical laws, not to increase our incomes, but to protect the people of our State against ignorant pretenders and fakirs.

Let us *all* get together and use our influence in such a way that it will be felt.

Supt. Emmerson, of the Boston Public Schools, favors the appointment of a medical board for the prosecution of the study of tuberculosis and its prevention in the public schools.

The new Medico-Chiurgical Hospital of Philadelphia was opened and formally dedicated on February 23rd. This is one of the best equipped of hospitals and has all the modern improvements in every line that has been recognized as essential to the best work in hospital practice.

Correction.

The types made quite an error in an ℞ in Dr. Wakefield's paper, in March number, page 168. The second ℞ on that page should read Vaseline instead of Glycerine.

Selections From Our Exchanges.

The London *"Lancet"* of the 30th of January, 1904, publishes a long interesting article headed: Some Points Concerning Natural Mineral Waters in General and Apollinaris Water in Particular. In view of a recent action, in which the question whether Apollinaris was entitled to be called a natural mineral water was decided in the affirmative the *"Lancet* has sent a special commissioner to visit the Apollinaris Springs in Germany, and he now reports the result of his investigations there and sets forth numerous analysis made on the spot and of apollinaris purchased in the open market. The article concludes as follows:

"It is difficult to suggest, in the face of the facts just recorded and of the experience which has decided upon the adoption of the methods of bottling apollinaris which we have described, how those methods could be altered with any possible advantage to the public or how any modification of those methods would enable the public to receive the water in a condition more natural than it is. As a matter of fact apollinaris water is bottled in such a way that the natural equilibrium of the water and its complement of gas at a depth of 50 feet in the spring are preserved in the bottle for public use. Both water and gas are absolutely the natural products of the spring, and the composition of the bottled water is, according to our analysis, always the same and without any appreciable variation in the mineral constituents. Some portion of a useless constituent, in the form of oxide of iron (the total amount in the water being quite minute) separates from the water prior to bottling but a useful constituent, in the shape of a small quantity of salt, is added to augment the amount of salt already naturally present in the spring in order to prevent the possible decomposition to which the sulphate of sodium of the water is occasionally liable. The taste of the water in bottle is identical with that of the water taken directly from the spring. Apollinaris water has a peculiar soft flavor which is due not to common salt at all, but in part to the alkaline carbonates which neutralize the acids in the mouth, and in part to the natural state of combination of the mineral ingredients. As Professor Oscar Liebreich has said, 'even the best manufactured artificial mineral waters differ from the natural ones in taste and value.' There is nothing disclosed in our analysis of the bottled water which is not found in the water at the spring. In view of these facts which we have taken some trouble to ascertain for ourselves, it seems to us that the recent decision of the Lord Chief Justice that appollinaris water is entitled to the description of a natural

mineral water is in accordance with both law and common sense.

"We may add that our analysis and observations are in substantial agreement with those given at various times by the late Professor Virchow, Professor Bischof, Professor Liebreich, Professor Mohr, Professor Hoffmann, Professor Kekule, Professor William Odling, and the late Sir Edward Frankland."

Subjects for Anaesthesia.—Dr. Hewitt divides his difficult and bad subjects for anæsthesia into six classes: (1) Patients whose general health is good, possibly exceedingly good, but who possess some physical peculiarity rendering them more or less liable to intercurrent embarrassment or arrest of breathing. (2) Patients whose respiratory tract is in some way encroached upon or whose respiration is in some way hampered by pathological or other conditions. (3) Patients suffering from certain grave visceral or constitutional affections. (4) Highly nervous or excitable patients, those suffering from nervous affections; and those who have been addicted to the excessive use of alcohol, tobacco, morphine, or other drugs. (5) Patients displaying, in a state of combination or association, the characteristics of two or more of the foregoing classeses. (6) Patients who prove to be difficult or bad subjects without any discoverable cause. —*The Hospital.*

Two Advantagous Procedures in Anaesthesia Work.—Victor C. Pederson speaks of the first procedure as a new sequence in which the series is nitrous oxide, then nitrous oxide and ether combined, and finally ether alone. The purposes of the technique are to avoid any gas cyanosis, to induce ether narcosis very slowly without any reflexes, such as coughing, and finally to obtain a full degree of ether narcosis with the utmost safety and convenience to the patient. There is, too, a great economy of gas. The writer prefers the Bennett apparatus. The gas-bag is filled to its half capacity for the average patient. With the valves of the gas-chamber open, the patient is requested to breathe. As soon as he understands what is required of him and the face-piece is seen to fit airtight, the gas is turned on. After from two to four full respirations with the expiration-valve of the gas-chamber open, this is closed so that "rebreathing" is initiated. The patient now takes from two to four respirations in this manner when he is generally sufficiently under gas—narcosis for the next step. This consists in very slowly turning on the ether—so deliberately that it takes from four to eight minutes to pass from "air" to full "ether." The ether in the ether-chamber is judiciously replenished, and if necessary likewise increased. If there is any delay in the appearance of the normal ether respiration, the nitrous oxide ether combination is continued until it develops. When all the symptoms of complete ether—anæsthesia are present,the gas-chamber and bag are removed, and the ether bag is attached to the ether-chamber, and the patient is ready for operation. The second procedure has reference to the position of the patient for operations upon the kidney, and is described by the writer as follows: After the patient is narcotized in the dorsal position, he is transferred to the operating table, turned up on his side, and the Edebohls' bag is placed in position. The shoulders are then raised from the table and rested upon a sand-bag reaching from shoulder to shoulder, oval in cross-section, about four inches in its longest diameter and reasonably soft. This brings the pressure of the chest upon the shoulders and upper ster-

num, and not as heretofore, upon the base of the neck. When the shoulders are thus elevated free of the table the heat may be moved in any direction whatever, and the jaw of the patient is absolutely under the control of the anæthesist. The writer places other sandbags under the Edebohls' bag, thus securing a proper flexion and torsion of the chest upon the abdomen. The writer adds that he cannot lay too much stress on the importance of securing freedom of the head and neck as a most important aid to the narcotizer in giving any anæsthetic as uneventfully as the idiocyncrasy of his patient will permit.—*Medical Record.*

Medical Gymnastics and Massage in the Treatment of Sprains.—Carl Kellberg states that Beighman treated 145 cases of sprain with massage and gymnastics. All were completely restored. Thirty-five out of thirty-eight additional patients who came from nine days to three months after receiving the injury, were also cured. Treatment should commence as soon after injury as possible, or as soon as the swelling has ceased to increase, and should continue until complete restitution is accomplished, preferably two treatments a day, each of about twenty minutes' duration. Usually the tenderness is at first too great to allow any manipulation of the swelling itself, in which case the treatment may begin with effleurage or strokings above and below the inflammatory area in the direction of the vein and lymph stream. As tenderness diminishes the strokings may increase in strength. When resorption is fully established and the tension of the tissues becomes less, friction is added consisting of circular manipulation, either with the thumb or the tips of the fingers, at first lightly but later with considerable pressure. Special attention should then be paid to the grooves and depressions between the bones and other places which have not been accessible to effleurage. Exercises are now added, beginning with light, passive movements in all directions in which the joint is capable of moving. As the power of motion improves, active movements are added, at first with, later without, the resistance of the operator. If ligaments are ruptured or if there be hemorrhage into the joint, movements should be postponed.—*The Chicago Medical Record.*

An Early Advertisement of Jenner's Vaccine.—The Scientific American for July contains this interesting piece of old-time news. It says that a little more than a hundred years ago Dr. Jenner announced his discovery of vaccine as an alleviator of smallpox. The following is a verbatim copy of that call published in the London *Times* which was signed by about one hundred of the medical profession, scientists, members of Parliament, and the nobility: "London, January 10, 1803. The invaluable discovery of Dr. Jenner, for the extermination of smallpox, having undergone the most rigorous investigation, and received the sanction of Parliament, a meeting will be held at the London Tavern, Bishopsgate street, on Wednesday, the 19th inst., at twelve o'clock, to consider the best means of carrying the same into effect, when the company of every gentleman disposed to concur in this laudable undertaking is earnestly requested. The Chair will be taken by the Lord Mayor precisely at one o'clock."

Pathogenesis of Gonorrhocal Epididymitis and the Treatment of the Same by Puncture.—Gustav Baermann says that epididymitis which develops

during the course of a gonorrhœa is due to a local invasion of the gonococcus ,and that these organisms can be cultivated with regularity from the puncture fluid. In the majority of these cases of epididymitis there occurs very quickly an abscess formation which has not hitherto been diagnosed by clinical means. Such suppurations are either pseudo-abscesses due to stagnation of the circulation and followed by secondary breaking down of the walls of the vas epididymitis, or they are pure abscesses which arise in the surrounding connective tissue and occasioned by the invasion of gonococci through the lymph channels. In all cases which go to suppuration a smaller or larger hydrocele develops, which is due to the invasion of the tunica vaginalis by gonococci. All cases of epididymitis, which occur in conjunction with attacks of non-gonorrhœal urethritis are due to a local invasion of the micro-organism, which gives rise to such a urethritis. All cases of epididymitis which set in with pronounced symptoms should be treated by early puncture, since by so doing the chances of subsequent abscess formation are materially lessened. In all cases the hydrocele should also be punctured in order that the pressure may be relieved and conditions favorable for absorption established.

The Treatment of Sciatica.—J. M. Clark extols the virtues of Weir Mitchell's plan of immobilization of the limb by the long splint. He has employed this device in twelve cases. Eleven were men, their average being forty-nine years. The average duration before coming under observation was nearly six months; the average duration of treatment was five and a half weeks. Ten cases were cured. One had a severe relapse some weeks later, but was cured by a second course of treatment. One was not relieved, but he was a restless patient and would not keep the splint on. The restraint is at first very irksome and a hypodermic of morphine is often required the first night or two. The splint must be carefully watched and readjustment may be necessary, especially if pain appears in the foot, behind the outer malleolus or in the ankle.

Remote Sequelae of Adenoids.—C. D Conkey writes that, broadly speaking, adenoids pass away before the child passes into young manhood or womanhood, but that from 5 to 15 per cent. retain their relative size well up into middle life. In regard to the sequelæ, the author recapitulates as follows: Nature often fails to bring relief to the organs of the body influenced by the presence of adenoids, by the shrinking process which take place about the age of puberty. The facial bones are arrested in their development, giving a characteristic appearance to the facial expression which is far from beautiful. The nasal cavities are narrowed by long years of non-use, and are frequently distorted by the development of a high palatal arch encroaching upon their caliber. The habit of mouth-breathing is acquired especially at night, which acts deleteriously upon the ears and upon the respiratory organs. Chronic postnasal catarrh is a frequent accompaniment of adenoids and persists after their disappearance. —*Wisconsin Medical Journal.*

On the Use of Pure Carbolic Acid in the Treatment of Smallpox.—A. E. Brindley and F. W. Bonis (*Lancet,* Oct. 24, 1903) recommended the use of pure carbolic acid in the treatment of this disease. The treatment is carried out in the

following manner: The pure acid in a liquefied state is applied to the vesicles over a limited area with a small camel's hair brush, the application being made on successive days. On the first day the face and neck are selected for treatment, on the following day the hands and arms, then the lower extremities, and finally the trunk. The effect of the acid is seen in the rapid shriveling up and scabbing of the vesicles. A second or third application may be made if necessary over certain parts of the body. An important detail of the treatment is to secure the early removal of the scabs, either by an oil poultice or otherwise, as this tends to prevent subsequent formation.

This method of treatment, according to the writers, is one which takes some time to carry out, as it must be done carefully and thoroughly if the best results are to be obtained. There is no reason why it should not be entrusted to an intelligent nurse, with instructions to use the acid cautiously in the neighbood of the eye, and not allow it to run on the healthy skin. The treatment is found to cause little or no pain or discomfort—in fact, it relieves the intense irritation which is so prominent a feature in smallpox. We have not observed any signs of carboluria or other evidence of toxic action from absorption of the drug. The effect would appear to be purely a local one, the acid penetrating the walls of the vesicles and pustules, disinfecting their contents, and hence preventing the absorption of septic matter into the system.

One of the most striking results of thetreatment is the comparative mildness of the secondary symptoms or those coincident with the maturation of the pustules. In many cases the patients expressed themselves as feeling well and hungry by the eighth or ninth day after the appearance of the rash, or even earlier. By this time pustules on the face will have disappeared, and the great majority of those on the limbs and trunk will have dried up or aborted. After the temperature has fallen on the appearance of the eruption, it usually remains at a low level during the rest of the illness, even in severe confluent cases averaging not more than 100 degrees or 101 degrees F. In several of the author's patients the temperature was practically normal throughout. A corresponding improvement is noticed in the state of the pulse and the general symptoms.

With regard to the subsequent pitting the carbolic treatment is decidedly beneficial in lessening the disfigurement, although it is not to be relied on as a certain preventive. We think it is reasonable to conclude that, by shortening or modifying the severity of the pustular stage of the disease, the liability to the formation of deep and permanent scars is diminished. Another point is that this use of the germacide tends to diminish the risk of infection from aerial convection, and to remove the disagreeable odor which accompanies many cases of the disease.

The November number of *The Canadian Practitioner and Review* is devoted to an account of the opening of the new laboratories of Toronto University, and the amalgamation of the medical faculties of Toronto and Trinity Universities, and the various addresses on the occasion of the opening of the first session under the new regime.

The ground plans of the medical building and cuts of the medical building, the biological buildings, the chemical laboratory, and the library are given. The description of these various buildings is too long to be given and an ex-

tract would hardly do justice to their merits. The unit system of Prof. Minot, of Harvard University, is closely followed, and ample facilities for laboratory work of every kind, and original research have been provided.

The addresses on the occasion were of a very high order, and many distinguished visitors were present. Prof. Sherrington, of Liverpool, Eng., was the principal speaker. He spoke of biology, its importance, and of its study, the advantages of a center for the prosecution to scientic pursuits, the burden of teachers, the university as a school of thought and training and the use of laboratories.

Several other speakers followed, many from our side of the line, among them Profs. Welch and Osler, of Johns Hopkins, Bowditch, of Harvard, Crittenden, of Yale, and Barfler of Chicago.

A special convocation was held on October 22 for conferring honorary degrees, and the following were presented for the degree of LL. D., viz: W. W. Keen, of Jefferson College; W. H. Welch, of Johns Hopkins; Wm. Oster, of the Johns Hopkins; R. H. Chittenden, of Yale; Chas. S. Sherrington, of University of Liverpool; H. P. Bowditch, of Harvard.

The amalgamation of the faculties of these two universities, and their splendid equipment for work, unequaled on the continent according to Prof. Osler, places our brothers across the border in the front ranks for teaching scientific medicine, and we congratulate the profession of the Dominion upon the favorable auspices presented.

NEWER MATERIA MEDICA.

Brief Observations on Some Conditions in Women That Are of Much Concern to the Practitioner.

By J. Ridgeway Simms, A. M., M. D , Racine, Wis.

The condition of which I wish to speak are dysmenorrhea, and the state following miscarriage or abortion, in which there are retained portions of the placenta and membranes that require removal or expulsion.

For lack of space, I shall devote myself, in the present paper, chiefly to dysmenorrhea, and will dismiss the condition following abortion with a few remarks, which may as well precede the other part of my article. I reserve for a future communication the detailed discussion of this important and interesting clinical condition.

The effects of retained placental or fetal tissue in a partially successful miscarriage or abortion consist in hemorrhages, purulent discharge, enlargement of the uterus, subinvolution, metritis, endometritis and sepsis. The indications in these cases are, therefore, the thorough emptying of the uterus and the rendering of the womb-cavity aseptic.

In ordinary cases this must be done by surgical interference, including curetting and the removal of all decomposing and diseased tissue, followed by the application of antiseptics to the endometrium. There is a class of cases, however, in which for one reason or another curettage is refused by the patient, and in which it is incumbent upon the physician to give what relief he can by medical means. In such cases I have prescribed Ergoapiol (Smith), a combination of the active principles of ergot (ergotine) parsley (apiol) and cer-

tain other emmenagogues and uterine tonics. In one case of this kind which came under my observation some months ago, I used Ergoapiol (Smith) with such marked success, that I learned since then to rely upon this preparation in removing the retained fragments from the uterus, emptying the organ and reducing it to its normal size and functions. The remedy in question has proved so trustworthy in my hands in these cases, that when it disappoints, which it rarely does, I look about to ascertain wherein I myself have erred.

A discussion of this causes of dysmenorrhea would lead us too far in the present brief clinical paper, and it will suffice if I assume that the reader is acquainted sufficiently with this part of the subject to follow me in the remainder of the article. The clinical diagnosis of dysmenorrhea is in itself easy enough, while the diagnosis of the cause is not always so simple. In the cases presented here I paid especial attention to the causation of the menstrual pain, as I believe that in this manner I was better able to outline the indications for treatment. It goes without saying that dysmenorrhea from mechanical obstruction is not amenable to medical treatment. Fortunately, however, it has been in my experience at least, not frequent, as dysmenorrhea depending upon congestion. The specially disagreeable and intractable form of dysmenorrhea which is accompanied by a fetid discharge as a result of the decomposition of the retained menstrual blood, also comes under discussion here, as the use of douches with antiseptics and deodorants cannot be hoped to affect it permanently, while the employment of more radical medicinal means does bring about the desired effect in this condition.

In congestive dysmenorrhea, and in that form which is accompanied by fetid discharge, the indications are to diminish congestion, by promoting the contractions of the uterus and relieving it of the accumulated blood, to stimulate glandular activity in the mucosa, to restore the tone of the uterus and the nutrition of its tissues to normal, and to relieve spasms and pain.

The following cases illustrate the effects which I obtained with the use of Ergoapiol (Smith) in the treatment of dysmenorrhea:

Some months ago I was consulted by a young woman who had suffered from scanty, fetid menstruation, accompanied by a great deal of pain, since the birth of her first child seven years previously. Her labor had been followed by a tear of the pernieum which had been left unrepaired, and also a laceration of the cervix uteri. This patient consulted a specialist, but his treatment did not give her relief. Examination revealed the presence of the uterine and perineal lacerations already mentioned, and disclosed a chronic endometritis that had given rise to a fetid discharge and to pain during each menstrual period. I repaired to the tears, curetted the uterus and hoped in this manner to obtain permanent relief of the patient's symptoms. After she had recovered from the operations, she declared that she was feeling better than she had been for years. But very soon the fetid discharge and the pain returned at each menstrual period, and evidently something else had to be done if I wanted to save my reputation. I then tried local applications, alteratives, uterine tonics, etc., all without avail, until finally Ergoapiol (Smith) was given. The result was immediate relief and a gradual and permanent improvement in the menstrual flow until it was free from pain

and devoid of any disagreeable odor.

This patient was evidently suffering from congestive dysmenorrhea which was intensified by the presence of lacerations of the cervix and the perineum which had existed since parturition. The result attained illustrates very well how Ergoapiol (Smith) acted upon the uterus, restoring its tissues to normal condition and re-establishing the menstrual function upon its normal basis.

Another type of dysmenorrhea, that which I term "nervous," but which the authorities term "neuralgic, is illustrated by the following case which recently came under my care:

The patient was a young woman who had been married two years, but had not borne any children. She stated that she had pain during the menstrual period from the first onset of menses, and at the time of examination she also complained of a fetid discharge. The menstrual flow was scanty and rarely of blood red color. Just before and after the period she had backache and headache, her complexion was unhealthy, not bright and clear as that of her sister, and she appeared older than she really was. She always dreaded the onset of the menses which recurred with a regularity that is not always present in these cases. She was easily excited, and received impressions vividly and indelibly. Her digestion was poor, and she was often sleepless, irritable and peevish.

Vaginal examination revealed a slightly thickened os and slight endocervicitis with erosions of the cervix. Cod liver oil, malt extract, hypophosphites, and aromatics, in combination, 25 per cent. of each, were given freely during the intervals between the menstrual periods and for three days before the expected menstruation Ergoapiol (Smith) was given in capsules, one being given three times daily until the discharge ceased. At the fourth period after the beginning of the treatment she was relieved of all her symptoms, and was free from pain and fetor during menstruation. Locally, tincture of iodine and occasionally tampons of ichthyol and glycerine were applied. The cure was permanent and in every way satisfactory.

722 Wisconsin Street.

Catarrhal Treatment of the Upper Air Passages.

By Clarence G. Clark, M. D., Assistant Surgeon to Presbyterian Hospital, O. P. D., New York; Formerly Assistant Surgeon to New York Hospital, O. P. D.

Among the diseases of the upper-air passages we have first—two varieties, acute nasal catarrh and chronic or naso-pharyngeal catarrh. In the latter subdivision we have the atrophic and hypertrophic varieties and the form which is a mere manifestation of some general systematic disease, i. e., the ozena of syphilitics. The first two varieties are merely different degrees of the same process. The nasal membrane after a series of acute attacks becomes chronically inflamed with a muco-purulent discharge. The membrane is congested and covered with a thin muco-pus. In this form treatment is most effective. But as the disease progresses the membrane becomes hypertrophic and a chronic tenacious mucus is secreted. This hypertrophic form is generally accompanied by a stenosis of the upper-air passages, especially on the convex surfaces of turbinated bones, which eventually becomes enlarged and there is a constant dropping of mucus into the back of the throat. Still more chronic is that atrophic catarrh where the mucus is atrophied and the secretion is dried up.

The treatment of these cases is simple

if seen at the out-set. The principle of cleanliness underlies the whole thing. The patient should be supplied with some good alkaline solution, such as Glyco-Thymoline, and instructed to douche the nasal passages twice daily. This with proper hygienic managing of the case is all that is necessary in the majority of these cases seen at the beginning of their chronicity. If the follicles are hypertrophied they may be touched up with the Galvano-Cautery. This especially applies to the naso-pharynx.

The best form of douche for use in these cases is the Bermingham. It is easy for the patient to use this douche and its size makes it convenient to carry. It is a bad practice to use a syringe, as too much force may force the discharge into the frontal sinus and cause unpleasant complications. If the turbinated bones are greatly enlarged an operation for their removal is necessary before treatment can be effective.

For use in the douche I have found Glyco-Thymoline to be an excellent preparation. It has the advantage of being alkaline and at the same time it is pleasant to use and does no harm if swallowed.

The following cases will illustrate the treatment of these cases:

Case 1.—Mr. A. B., age 35. Came to office in June 12, 1902, complaining of nasal discharge. History of several acute attacks of ordinary coryza which gradually became more lasting. Is a heavy smoker and inhales smoke.

Examination.—Found nasal membrane congested and covered with tenacious mucus. Turbinated bones slightly hypertrophied.

Diagnosis.—Chronic nasal catarrh, becoming hypertrophic.

Treatment Prescribed:

R

Acid Tanica	gr. xx
Acid Sulph. Arom	m xxx
Glyco-Thymoline	ziii
Aqua dist. q. s.	zviis

and instructed to use it in Bermingham douche twice daily, first cleansing the nasal membrane with a salt solution dr. i to quart of warm water.

As the discharge become less tenacious and less profuse I stopped the astringents and had patient continue with Glyco-Thymoline in proportion of one part of four of water. With this treatment the discharge ceased in three weeks and patient was discharged with instructions to continue using the douche daily.

Muscular Soreness and Rheumatism Due to Grip.—In speaking of the treatment of articular rheumatism, Hobart A. Hare, M. D., Professor of Therapeutics in the Jefferson Medical College and editor of *The Therapeutic Gazette,* says: "Any substance possessing strong antipyretic power must be of value under such circumstances." He further notes that the analgesic power of the coal-tar products "must exert a powerful influence for good." The lowering of the fever, no doubt, quiets the system and removes the delirium which accompanies the hyperpyrexia, while freedom from pain saves an immense amount of wear, and places the patient in a better condition for recovery. The researches of Guttman show conclusively that these products possess a direct anti-rheumatic influence, and among those remedies, antikamnia stands pre-eminent as an analgesic and antipyretic. Hare, in the last edition of his *Practical Therapeutics* says: "Salol renders the intestinal canal antiseptic." This is much needed in the treatment of rheumatism. In short, the value of salol in rheumatic

conditions is so well understood and appreciated that further comment is unnecessary. The statements of Professors Hare and Guttman are so well known and to the point and have been verified so often, that we are not surprised that the wide-awake manufacturers placed "Antikamnia and Salol Tablets" on the market. Each of these tablets contains two and one-half grains of antikamnia and two and one-half grains of salol. The proper proportion of the ingredients is evidenced by the popularity of the tablets in all rheumatic conditions and particularly in that condition of muscular soreness which accompanies and follows the grip. The Antikamnia Chemical Company, St. Louis, Mo., will send samples to physicians on application. Please mention this journal.

Sanmetto in Hematuria with Retention of Urine.—I prescribed Sanmetto in a case of hematuria with retention of urine. The patient had improved a great deal by the time another supply of Sanmetto had reached me. I was obliged to withdraw the urine with a catheter for nearly a week, from three to four times in twenty-four hours also had to wash out the bladder and use suction to withdarw the clots. Since using Sanmetto the urine passes again normally and the constitutents are also nearly normal and the patient has fully recovered, with the exception of a small quantity of albumen. I shall prescribe Sanmetto in the future if cases for which it is indicated fall to my care for treatment.

W. D. Erdman, M. D.

Macungie, Pa.

Pennsylvania Pronounces it Wholesome.—Recently a direct effort was made to frame legislative measures which would presumably exclude Vin Mariani from sale in the State of Pennsylvania. The State Board of Health promptly took up the problem. They employed two of the most prominent chemists of Philadelphia, namely, Professor Samuel P. Sadtler and Dr. F. A. Genth, who, after critical analysis of Vin Mariani, made from purchases of their own selection, failed to find pure cocaine in demonstrable quantity. This not only refutes the absurd falsity of suspicion that any alkaloid is surreptitiously added to the wine, but confirms in the most convincing manner, the results of numerous former analysis made by the governments of France, Germany, Russia, and also in the United States. Each of these analysis admits the absolute purity of Vin Mariani as a preparation of true Coca leaves in a sound and nutritious French wine. As the Pennsylvania State Board of Health officially expresses it: "Vin Mariani is not a cocaine preparation, but a wine possessing the aromatic and desirable qualities of fresh Cocoa leaves."—*The Cocoa Leaf,* November, 1903.

N. C. Vaughn, M. D., of Cincinnati, O., Grad. Howard Univ., Washington, D. C., 1896, Member National Association Physicians and Surgeons, member Ohio State Medical Society, Member Cincinnatic Academy of Medicine, writing, says: "I most cheerfully recommend Sametto for prostatic and bladder troubles. It makes peace with the stomach, is readily assimilated, has special affinity for the urinary tract, healing and giving tone to the diseased parts."

The Clinical Application of Ingluvin

Ingluvin is the name given to a preparation made from the gizzard of the domestic fowl. Since its introduction, no remedy of modern times has attracted more attention among physicians far and near nor received higher endorsement than Ingluvin, which is now supplied throughout the world. The product occurs in the form of a soft powder of a yellowish-gray color and a faint odor. It is almost devoid of taste. A slightly bitter after-taste is left, but this soon disappears. Ingluvin is insoluble in water and the usual menstrua. It can be administered, stirred into water or milk, or in tea, coffee, chocolate, wine, etc., if no therapeutical objection exists. Its feeble taste is easily disguised. Ingluvin is also put up by its manufacturers (Messrs. William R. Warner & Co.) in convenient 5 grain tablets. The dose of Ingluvin is from 5 to 20 grains. Spread upon bread and butter it may be conveniently administered to children. Ingluvin possesses the advantage of being compatible with alkalies.

As the gizzard contains no peptic glands, the undoubted efficacy of Ingluvin cannot depend upon the presence of a digestive ferment analogous to pepsin. It has been ascertained that its virtues reside in a peculiar bitter principle which enters into its composition. It is prescribed in the same manner, doses, and combinations as pepsin.

Ingluvin is prescribed in the vomiting of Pregnancy, Dyspepsia from Uterine Disease, Colic, vomiting caused by Alcoholism, and other digestive derangements. It is likewise beneficial in dyspepsia when produced by functional inactivity. It will promptly check the diarrhœa which is caused by indigestion. By reason of its influence upon the stomach and bowels, Ingluvin is capable of marked service in cases of cholera infantum and cholera morbus.

The evidence in favor of Ingluvin in all cases of gastric disturbance is overwhelmingly convincing as to its superior efficacy over pepsin, and its use should never be neglected in any case of gastric irritability, no matter what may be the cause.

From the preceding abridged account it will be seen that Ingluvin possesses an exceedingly important sphere of usefulness. Disorders of the alimentary canal exert such a widespread influence, they are so often linked with profound general disturbances, and they are so distressing in themselves, that any remedy which demonstrates its efficacy in regard to those affections should be warmly welcomed.

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MANUFACTURING PHARMACEUTISTS

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THERAPEUTIC HINTS.

Angina Pectoris.—Huchard recommends the following formula to be used in the treatment of this condition:

℞ Sodii iodidi.....gr. 80-160
Sodii arsenatis gr. ¼
Aq. dest. q. s. ad.....oz. 5

M. Ft. mist. Sig. Two or three teaspoonfuls daily.—*Philadelphia Medical Journal.*

For Local Hyperidrosis.

℞ Betanaphtol 5 parts
Glycerin.....10 "
Alcohol.....100 "

M. For a lotion. To be diluted.—*Brocq.*

For Buboes.

℞ Ichthyol.....dr. 1
Chloretone.....gr. 20
Glycerin.....q. s.....oz. 1

M. When pus forms in a bubo make two incisions, one at the most dependant place and one above, leaving a portion of intervening tissue. Irrigate thoroughly with a strong antiseptic solution and inject the above. Repeat irrigation and dressing each day.—*I. A. Withers, M. D., in Medical Brief.*

Summer Diarrhoea.—A tendency to persistently frequent stools after the acute symptoms have been overcome and the child is being cautiously led back to a simple dietary, according to Dr. T. Southworth, in *Medical News,* is better controlled by the following:

℞ Pepsinæ..... gr. 1
Acid hydrochlor, dil.....min. 3
Glycerine.....min. 4
Aquæ menthæ pip.....dr. ½
Aquæ.....dr. 1

M. Sig. In water four times a day after food.

Pulmonary or Intestinal Hemorrhage.—The following formula is recommended (*Am. Med.*) for hemmorrhage of intestinal or pulmonary origin:

℞ Calcium chlorid, c. p. (crystal).dr. 4
Codeine sulphate or morphine sulphate.....gr. 1
Essence of pepsin.....oz. 1
Distilled water q. s., ad.....oz. 2

M. Sig. One teaspoonful in little water every two or three hours.—*Med. Council.*

—*Treatment of Asthma.*—The cause of asthmatic attacks, according to G. R. Johnson (*Med. Times*) depends upon the arterial tension to a large extent and hence indirectly diet becomes an important factor in the treatment. Meats, soups and meat extracts should be avoided as poison, for they are rich in uric acid, which stimulates contraction of arteries. Milk, fruit and vegetables should compose a large part of the diet. A few successful therapeutic combinations are given:

℞ Potas Iodid.....dr. 3
Ext. Bellad. Flu.....dr. 1
Ext. Lobel Flu.....dr. 2
Ext. Grindel. Flu.....oz. ½
Glycerine, Aquæ } aa.....oz. 1½

M. et. Sig. Tablespoonful every two to four hours.

A good external application is:

Chloroform.....oz. ½
Olei Terebinthinæ.....oz. 1
Sprts. Rosmarini.....dr. 1½

In the suffocative stages of asthma the following is recommended:

℞ Tinct. Lobeliæ.....oz. ½
Tinct. Sanguinariæ.....oz. 2
Olei Menth. Viridis.....oz. ½
Syrupi Empyreumatici.....oz. 5

Sig. Half teaspoonful every two hours.—*Medical News.*

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Uric Acid and Its Elimination.— What can we do to relieve the distress caused by an excess of uric acid in the blood? The answer is given in the following arguments:

We must first determine what factors are operative to keep the uric acid in solution and we must then attempt to enforce these factors. This point has been made the subject of an exhaustive investigation by Dr. A. C. Croftan, of Chicago, and I can not do better than quote *in extenso* from the Doctor's article, which appeared in a recent issue of the *Journal of the American Medical Association*. Dr. Croftan in this paper explains how the sodium salts of phosphoric acid are concerned in keeping the uric acid in solution; how one series of these salts (the basic salts) dissolves the uric acid with the greatest facility, whereas another series (the acid salts) have a tendency to precipitate it. He puts it as follows:

"Phosphoric acid forms three salts with sodium as follows:

H_3PO_4, phosphoric acid;

$NaHPO_4$, mono-sodium-phosphate;

$NaHPO_4$, di-sodium-phosphate;

Na_3PO_4, tri-sodium-phosphate.

"The mono and the di-sodium phosphate normally occur in the urine. Uric acid is readily soluble in di-sodium phosphate, but it is not soluble in mono-sodium phosphate. The addition, in fact, of mono-sodium phosphate will cause the precipitation of the uric acid.

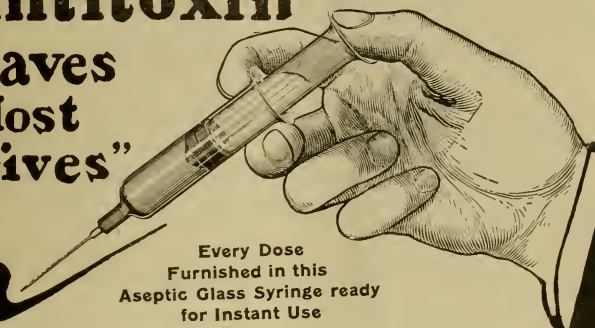
"It is clear, therefore, that the solubility of uric acid in the urine is enhanced by the presence of di-sodium phosphate and that the tendency of the formation of uric-acid concretions increases in proportion to the amount of mono-sodium phosphate that is excreted through the kidneys.

"It is also clear that any endeavor di-

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Third "	-	5.67
Fourth "	-	7.29
Later than Fourth "	-	14.49

Dr. H. C. Wood states that as soon as Diphtheria is suspected Antitoxin should be used. If Diphtheria develops, the disease is under control. If diagnosis is not confirmed, no harm has been done by the use of a reliable Antitoxin.

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rected toward preventing the precipitation of uric acid in the urinary passages must be concerned with increasing the amount of di-sodium phosphate and decreasing the amount of mono-sodium phosphate.

"The ideal would be to cause the complete disappearance from the urine of mono-phosphate and at the same time to produce the elimination through the kidneys of a quantity of di-phosphate sufficiently large to hold all the uric acid excreted in solution.

"The regulation of the phosphoric-acid content of the blood can be achieved by the administration of calcium salts. For, in the first place, calcium forms insoluble salts with the alkaline phosphates contained in our normal food, and in this way prevents the absorption of this moiety into the blood. In the second place, calcium, owing to the great affinity it possesses for phosphoric acid, combines with the phosphoric acid encountered in the blood-stream, and this proportion is subsequently eliminated in the form of calcium phosphate—*not, however through the kidneys, but in great part through the intestine.* This is an important point, for in contradistinction to sodium, potassium and magnesium, all elements that are chiefly eliminated through the kidneys 85 to 95 per cent. of calcium is eliminated through the bowel.

"It will be seen, therefore, that calcium given by mouth can, first, prevent the entrance of preformed phosphoric acid (phosphates) from the food into the blood, and can, secondly, prevent the phosphoric acid formed in the organism from passing into the urine by causing ist elimination through the intestine."

Dr. Crofton advises the administration of the carbonate of calcium to be given in 10 to 15 grain doses two or



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three times a day, together with a full glass of water. The results obtained from this practice in various manifestations of the uric-acid diathesis, gout, goutiness, rheumatism and particularly in gravel and nephrolithiasis are very gratifying.

It appears that we have here at last a true phsiological uric acid solvent, and that, to judge from the reports of careful, conservative, and at the same time scientific clinicians,, the administration of calcium salts is of great value in the treatment of this class of disorders.

I have supplemented Croftan's investigations with a sufficient experience to justify me, as above, in standing for his findings. I would even go further than he goes in my claims for the efficiency of this experiment, but in so doing have added certain synergists and prepared a c. p. calcium carbonate which, added to lithium and colchicine in "Calcalith" (Abbott), makes a remedy the value of which is untold. *It is true uric acid solvent,* stimulating every excreting *organ* and *is applicable to every* manifestation of the uric acid diathesis. A very great percentage of, if not all, cases of gout, rheumatism, uric acid headache, gravel, lithemia, phosphaturia, urinary hyperacidity, etc., will yield promptly to proper dieting and "Calcalith" with the addition of saline laxative or salithia to flush the alimentary canal, intestinal antisepsis to prevent putrefactive changes of food residues and strychnine arsenate, or the "triple arsenates" to take up the slack.—*Abbott in Alkalordal Clinic.*

Suprarenalin in Pulmonary Hemoptysis—The note by Dr. A. C. Bird on this subject is particularly interesting to me, as I have quite recently had a parallel case to his.

My patient, a young clergyman, was

sent to this district about two years ago, suffering from pulmonary phthisis. In September of last year he had a rather severe attack of hemoptysis, which, however, rapidly subsided under the ordinary treatment—absolute rest in bed, application of ice, etc. On December 6th he had a second attack—a very severe one— and in spite of the ergot and opium (both internally and hyperdermically), sulphuric acid, hazeline, terebene, ice locally and in the mouth, and absolute rest of body and voice, the copious coughing up of blood continued until the patient's pulse begin to show signs of collapse.

On December 19th I prescribed a teaspoonful of 1 in 5,000 solution of Suprarenalin (Armour) three times times daily,, and from the beginning of the first dose the condition of the expectoration changed. The bright red gave place to the "foxy" color, and after the third dose of Suprarenalin, all trace of blood in the sputum had gone, and has not reappeared as yet.

I have still more recently used Suprarenalin in a second case of hemoptysis, with equally rapid results, and also in a case of fairly severe post-partum hemorrhage again, so far as one can tell, with excellent effect.—*Arthur S. Hadley, M. B.*

A famous North Carolina Summer Resort.—Many debilitated persons find the heated term very trying, and the disease which causes their debility "gains ground" during this season of extreme depression. Our own Carolina mountains are yearly growing more and more popular as summer resorts, as their delightful summer climate becomes better known, and persons are flocking to this favored region from all over the South. The attention of the medical profession, whose advice is often sought in such matters, is invited to Ashe County, North Carolina in general and to the Bromine and Arsenic Springs. These springs are located at Crumpler, N. C., about 20 miles from the crest of the Blue Ridge.

A hotel, with accommodations for 100 guests, is kept open at these springs from June 1st to November. The water contains sodium arseniate, iodide and bromide and *more lithia* than many of the *noted* advertised lithia waters. It has proven its great value in disorders of digestion of the kidneys, and in rebellious skin affections. Drop a card for catalogue to Manager Bromin-Arsenic Springs, Crumpler, N .C., tioning this journal.

BOOK REVIEWS.

Diseases of the Eye.---By L. Webster, Fox, A. M., M. D., Prof. of Ophthalmology in the Medico- Chirurgical College, of Philadelphia, Pa.; Ophthalmic Surgeon in the Medico- Chirurgical Hospital. From the press of D Appleton & Co., New York. Price in cloth, $2.00.

This volume which is the recorded experience of a busy man, is not a mere ephemeral sketch of information on ophthalmology, but a digested summary of known facts, for use of students and practitioners of medicine. The gifted author lectures at the Medico-Chirurgical College during the past ten years forms the basis of much that he has written in his book. One feature—valuable to the student and busy practitioner—is the simplicity and clearness of the language used by the author in his effort to expound the principles

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which underlie the normal as well as the pathological changes that take place in the priceless organ under discussion. As a matter of course it was not possible to write a treatise of nearly six hundred pages on the eye and not present much that is common knowledge, but the author is a thinker, a pioneer, and he presents his own ideas of pathology and treatment, together with the results of the most recent investigations of others.

The arrangement of the work is characteristic of the man, partaking of his love of order and simplicity.

The diseases are considered according to the structures attacked in the order in which they are encountered in going from without inward. Among the articles of special importance, the reader's attention is directed particularly to those upon albuminuric retinitis, hemorrhagic rectinitis, lid operations, declination of the retinal meridians, cataract, glaucoma, and diseases of the orbit. In the line of therapy, X-ray work is undoubtedly the most beneficial of the recent discoveries. The subconjunctival injection of salt solutions in iritis and corneal ulcers, peridectomy in pannus, grattage in trachoma, and the use of opaque slips combined with correcting lenses for conical cornea, are likewise given the prominence to which they are entitled in the subject of treatment.

The book is lavishly illustrated by six beautiful colored plates and 296 text illustrations. Many of these are from original drawings and photographs, they impart a newness and freshness to the volume, aside from the great aid they render the student in making the text clear and easy of comprehension, even to the novice.

A point worthy of mention is the formulary at the back of the book. It contains in form convenient for ready reference, prescriptions for various forms of eye diseases the practitioner meets in his work. The publishers have given the profession a well printed volume, good size type and good paper.

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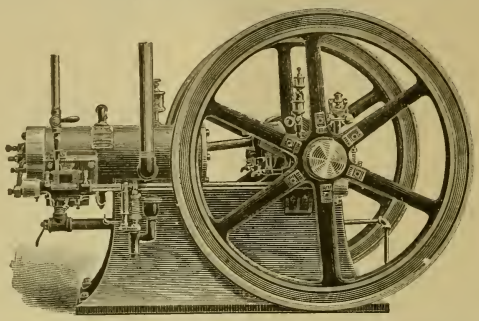
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The Literary Digest is a publication in a class by itself. A careful reading of this *one* weekly will keep the reader posted on what is going on in the world. A part of the contents of a recent issue is given below in evidence of the above statement:

Topics of the Day—Congressmen in the Postal Scandal. Cartoons: Unexpected perils of the War, The Ohio Lynching, Naval Predictions in Cartoon, Report on the Indian Land Scandals, Cartoon Glimpses of Statesmen in a Presidential Year, Democratic Objections to Democratic "Possibilities," Diplomatic changes in Latin America, The Polygamy Peril, Topics in Brief.

Letters and Art—Is the Taste for Poetry Declining? What Makes a Book Sell—A Publisher's View, "The First American Stylist of His Generation," Forbes Robertson's "Hamlet," Dostoyevsky, the Dominating Force in Russian Literature, Notes.

Science and Invention—The New Discoveries in Radiation, Where Are the Wireless Telegraphs? Rifle Practice Without Powder or Bullet, Effect of a Magnet on Phosphorescence, A Motor-Car With Motors in Its Wheels, What the Antarctic Continent is Like, How to Feel Music, Change of Color in Fishes, Science Brevities.

The brilliant manner in which the publishers of *Everybody's Magazine* have handled the subject of the St. Louis Exposition affords a clew to the success of the publication. The April number opens with an article on "The Greatest World's Fair," and the two men most able to do the subject justice have treated it. David R. Francis, president of the exposition company, fur-

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nishes the text, and Vernon Howe Bailey, the distinguished young artist, has done the illustrations. One is told and shown in the most interesting way just what to expect at St. Louis in May, and the prospect is amazing. This, however, is but one good feature in a varied number. Dr. Newell Dwight Hillis contributes a most important article on the subject of "Consolidating the Churches." This is in advocacy of applying the trust idea to the denominations, and is about as radical and revolutionary a project as Christianity has had before it in generations. Still another instance of good editing is a character study of Arthur Pue Gorman. The manly statesman's life has been written a hundred times, but here's really a brilliant sketch of the man, by E. M. Kingsbury, who told so amusingly two months ago the strange story of John W. Gates. It may be added that the fiction in this number is capital, especially the pampas story by William Bulfin.

THE PRACTITIONER'S HAND-BOOK.—International Medical Annual, 1904, 22d year of publication. A resume of the year's medical literature, by thirty-three department editors, with added articles by notable specialists. Substantially bound in cloth and fully illustrated by plates in color and black and white. 8vo, 740 pages, post or express paid, $3.00 net. E. B. Treat & Co., Publishers, 241-243 W. 23rd St., N. Y.

This volume is a review of the medical literature of the past twelve months and is the 22nd annual edition. A decided preference is given to material of practical value to the practitioner and the collatorators have drawn also upon their personal experiences in the various departments assigned them. There is a new departure consisting of stereoscopic views illustrating eruptions of smallpox, and scarlet fever antitoxin rashes and a full review of contributions during the year on Radio-activity. Those physicians wishing a systematic

survey of the past year's work in medicine and surgery will find it in this work, arranged in convenient form and edited by prominent specialists.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA—Fiftieth annual meeting held at Hot Springs, N. C., June 2, 3 and 4, 1903. President, Dr. A. W. Knox, Raleigh, N. C.; Secretary, Dr. J. Howell Way, Waynesville, N. S.

This volume covers the papers and proceedings of the last meeting of the State Society and also contains in full the newly adopted by-laws and constitution. The secretary and publication committee merit the thanks of the profession for the manner in which they have executed the work assigned to them. The frontispiece is a portrait of the President, Dr. A. W. Knox.

ANNUAL REPORT—Of the Surgeon-General of the Public Health and Marine Hospital Service of the United States for the fiscal year 1902. Washington: Government Printing Office. Treasury Department, Document No. 2331, Public Health and Marine Hospital Service.

This volume is full of practical matter and orderly statistics and reflects in a creditable manner the valuable work in sanitation and disease which is being done by this arm of the government medical service. The cuts are very clear and of good tone.

PROGRESSIVE MEDICINE, Vol. 1, March, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 337 pages, 7 illustrations. Per annum, in four cloth-

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Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy :

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis : gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

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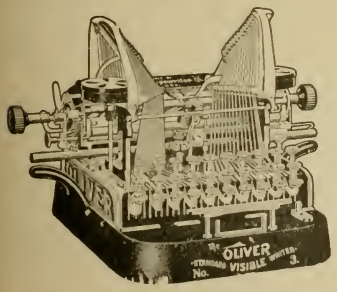
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Milwaukee fears a general invasion of hydrophobia, which has assumed an epidemic form. Dr. Nicholas Mann, of Chicago, has written to the Milwaukee Board of Health, advising the Board to see to it that every dog in Milwaukee running at large shall be promptly killer or muzzled.

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MEDICAL NEWS AND ITEMS.

North Carolina Doctors: Bear in mind the meeting of the State Medical Society in Raleigh on May 24th, and the meeting of the Board of Medical Examiners at the same place a week earlier. Doctors intending to read papers should send title of papers to Dr. J. Howell Way, Secretary, Waynesville, N. C.

San Francisco reports two deaths from plague in January.

The North Carolina Medical Society meets in Raleigh on Tuesday, May 24th.

The South Carolina Medical Association will meet in Darlington April 20th.

The Board of Medical Examiners of North Carolina will meet in Raleigh May 12th.

The annual meeting of the American Medical Association this year is to be held in Atlantic City from June 7 to 10.

Dr. Chas. Whitney Dabney has accepted the offer of the presidency of the University of Cincinnati. He will take up his new office September 1 next.

War on the spitting nuisance has been declared by the new Health Commissioner of New York. Officers have been sent to the ferry-houses, where the offense is most flagrant, and a number of the lawbreakers have been arrested.

Dr. J. P. Matheson, formerly resident physician in the Presbyterian Hospital in Charlotte, has completed a course of special study in Jefferson College, Philadelphia, and will locate at Belmont, N. C.

A resident of Chicago has sued a physician of that city for $25,000 damages, alleging that the doctor burned his face with the X-rays. He says that before treatment he had a heavy mustache and beard, and that now the beard will grow on only one side of his face.

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It is stated that Dr. Nicholas Senn, of Chicago, Ill., will shortly go to Japan to assume charge of the medical and surgical corps of the Mikado's army during the current war with Russia.

A press dispatch from St. Petersburg says that the chief of the Bacteriological Laboratory of the Imperial Institute of Experimental Medicine died of the plague January 20. He became ill January 16 after an inoculation with living plague cultures, and repeated injections of antiplague serum were unavailing. All who had been in contact with him have been treated with antiplague serum, and the staff of the laboratory, which is situated at Fort Alexander on a small island, has been isolated.

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The United States Public Health and Marine Hospital Service is said to have begun actively to prepare for the Panama canal campaign. Physicians are to receive special training, and under the supervision of experts will endeavor to prevent much of the sickness that is liable to occur among the workmen on the isthmus. The headquarters will be in a large hospital to be erected at Colon

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A party of health officials went to Mexico, February 1st, to inspect the sanitary condition of that country, with a view of getting the Mexican government to institute measures of prevention of yellow fever in future. This is in pursuance with an agreement that it is understood was entered into between the Mexican officials and Surgeon Wyman recently. The party consisted of Health Officers Taber, of Texas, Saunders, of Alabama, Purnell, of Mississippi, Souchon, Nolte and Owens of Louisiana, Wurtenbaker, of the United States Marine Hospital Service, and McKnight, of Laredo. Mrs. Taber accompanied the party.

Successful Treatment of Tetanus.—The newspapers of this city have noted the recovery from tetanus of a Brooklyn boy after the injection of antitoxin into the spinal sheath. This method was first practiced, we believe, by von Leyden in 1901, and five cases with three recoveries were reported in the *Journal of the American Association,* in 1902. In another column of this issue is a report from *The Lancet* of March 5, of four cases with three recoveries. This is a much more simple method than trephining the skull in order to make intracerebral injections and appears to be equally efficacious.—*Medical Record.*

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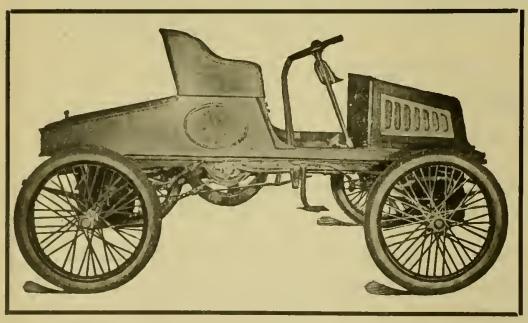
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Jewish Doctors Sent to the Front.—Some curious particulars are given in a dispatch to the *New York Times* regarding the workings of official anti-Semitism in Russia. M. de Plehve, who insisted upon revising the lists of reservists called out, has sent an enormous percentage of Jews to the front, including most of the doctors of that race in St. Petersburg. Out of 180 medical men who left at the beginning of the month 110 were Jews. Two reasons were given for this action. One reason was that the Hebrew servants are all supposed to be Liberals, whose presence in Russia at critical times is considered undesirable. The other alleged reason was that influences were brought to bear on behalf of certain non-Jewish practitioners, who were only too glad to get their rivals out of the way. The Jewish doctors sent to the East are deprived of part of their emoluments, and receive only 900 rubles (450) for traveling expenses, whereas Christians get 1 250 rubles.

Failure of Schmidt's Cancer serum.—Nine patients suffering from cancer have been treated at the Middlesex Hospital, London, by Dr. H. Josse Johnson since November 26, 1903. Concerning these cases, the members of the committee on cancer investigation report in *The Lancet* of March 5 that they have failed to observe any trace of a specific local or general reaction to the injections, and are therefore convinced that the material is entirely without diagnostic value. They have equally failed to see any local or general improvement in the condition of a patient. The injections in no wise altered the course of the disease. In the case of those patients who died microscopical examination of the tissues failed to reveal any differences in appearance from those usually met with in cases that have not undergone the special treatment. The material used was sent direct from Dr. Schmidt's laboratory to Dr. Johnson and Dr. Johnson made all the injections himself, except on two occasions. The material used was Dr. Schmidt's "killed culture."—*Medical Record.*

The Red Cross in the East.—A branch of the Red Cross Society has been established at Shanghai to assist both the Japanese and Russian wounded, and to relieve refugees. The Chinese have subscribed liberally to the funds of the society, being much exercised over the condition of their compatriots in Manchuria. It has been decided to establish a hospital at Newchwang. A pleasing incident is reported by the Tokio correspondent of the London *Standard,* who says that the kind treatment of the Russian wounded at Chemulpho is so appreciated by the Russian Government that it has contributed 2,000 yen to the Japanese Red Cross through the French Minister at Seoul.

One result of the war between Japan and Russia is that the world's supply of camphor has been cut off, and will probably remain so for an indefinite period. Practically the entire supply comes from Japan and Formosa, and about six weeks ago the Japanese government placed an embargo on its shipment. The result has been a sharp advance in price, and while the scarcity has not yet been felt to any extent, it undoubtedly will be as soon as the period of greatest consumption begins in April. The reason for the embargo by the Japanese government is that camphor is one of the necessary ingredients in the manufacture of smokeless powder.—*Medical Record.*

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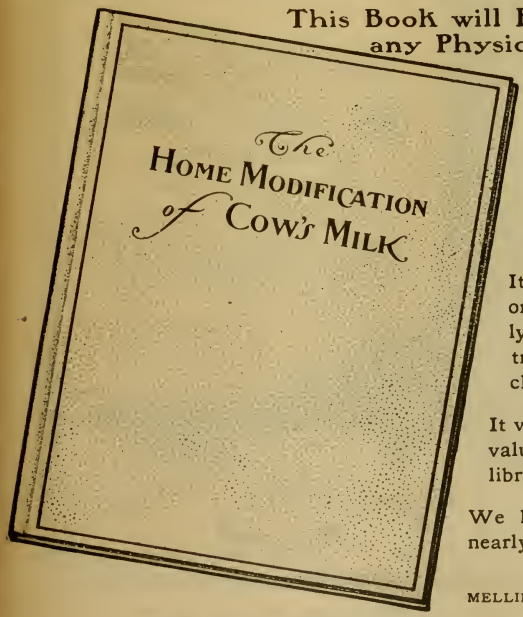
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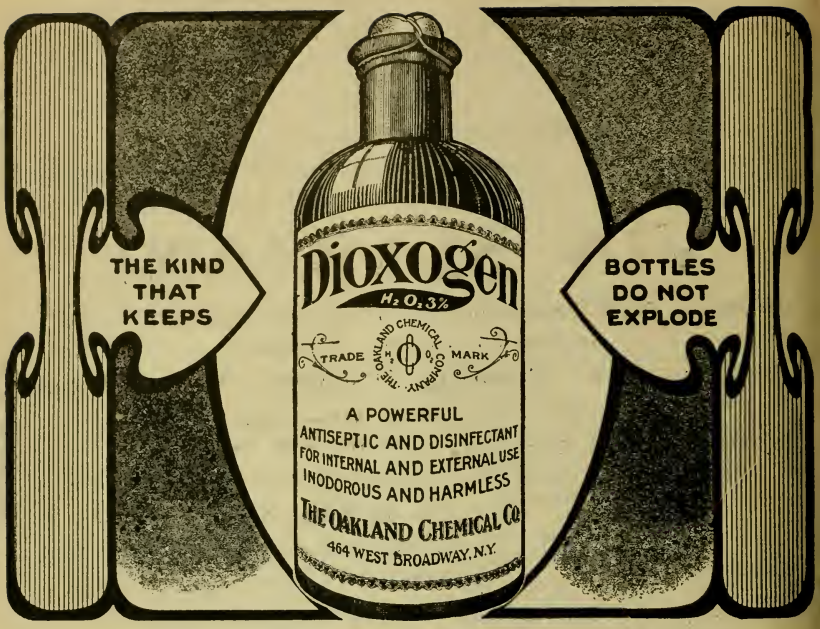
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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Ileo—Colitis.

By I. W. Faison, M. D., Charlotte, N. C. Professor Diseases of Children, North Carolina Medical College, and Dean of the Faculty of the Charlotte Department.

Your request to write an article for this month's issue of your journal relating to intestinal diseases of children with the view of making it a special issue along this line is a good one. I accept the invitation and select Ileo Colitis as my branch of the subject. In selecting this disease I do so with the feeling and full understanding that it is one of the most important and most serious of all the acute diseases of its season and subjects of attack. I shall try to be just as brief as possible that it may meet the objects desired. This disease occurs epidemically and endemically throughout this portion of the United States to a greater or lesser degree of severity every year. Especially during the latter part of the spring months and the early part of the first summer months, then during the change from summer to autumn. The causes are both specific and predisposing. The predisposing causes are sudden changes of the weather from hot to cold, acute intestinal indigestion—want of proper clothing, proper hygiene. The specific is the germ and the most constant of these is the shiga bacilli. To understand how to treat this disease in a scientific and judicious manner the pathology must be well and accurately understood. We today recognize four distinct types of this disease from a pathological standpoint. First: Where the mucus membrane of the lower ileum and colon only is involved by an acute congestion. Second: Where this progresses one step further and ulcerations of the mucus membrane occurs. Third: Still one step further and the deeper tissues and glands become inflamed and deeper infiltrations and ulcerations follow. Fourth: The membranous and pseudo diphtheritic form. The diagnosis upon this knowledge of the pathology then is not just to say that you have ileo colitis. This is easy to make and satisfactory to the laymen, but is it satisfactory to a well equipped and successful

physician when he discusses it to himself or his brother physicians? Nothing short of making a complete scientific and differential diagnosis between these four forms will enable a physician to treat his case as successfully as he should. The diagnosis of the first or catarrhal form (which is the first step and readily made and easily treated) we have slight fever—may be vomiting—frequent actions from bowels, first of the fecal matter both digested and non-digested—first flakes or lumps of mucus—which as the disease progresses increases—green in color and in reaction acid—now and then a streak or small spot of blood The second or ulcerative catarrhal form is the first form with the pathological condition progressing to shallow ulcerations of the mucus membrane only. With this we have more pains—more fever—more mucus and decidedly more blood and tenesmus.

The third form. Infiltrated follicular ulcerated, we have a very serious and progressive pathological condition—the infiltration, congestion and ulceration has dipped deep down into the deeper layers of the intestines, the glands are now involved and the tops of them are ulcerating and sloughing off and round cells of the glands appear in the dejections which can be readily discovered under the microscope, which fully decides the diagnosis as to this form of ileo colitis. The fourth or membraneous form is the most serious of all. The pathological manifestations are quite similar to the first form. More severe in every way. More vomiting. More fever and decidedly more general prostration and seriousness developes at once. The dejections must be closely observed to clearly and readily make the diagnosis. With the micoscope the shreds of the brown down mucous membranes can be readily seen and a correct decision reached. If no microscope you can wash the dejections and isolate the flakes of membrane and establish the diagnosis.

Treatment.—If we fully understand the pathological conditions and make the diagnosis based on these conditions as we should, the plain treatment will follow easily, if not always successfully. Still we must have decided ideas and well formulated plans in the management of these cases as they are always serious. Mechanical treatment: If much nausea, wash out the stomach as needed. The best means for this is a small glass funnel and a No. 12 elastic catheter and tepid sterile water. Wash out the rectum thoroughly twice a day in the earlier stages and then once a day or every two or three days after the case becomes chronic. Dietetic Treatment: Absolutely stop all milk and do not return to it till convalescence is well established. First twenty-four hours no food at all will be best, then barley or rice water with the white of an egg. Give plenty sterile water unless marked nausea is present. Albumin water can be given frequently with panopeton or liquid peptonoids. This branch of the treatment is exceedingly important and should be carefully and strictly carried out. Hygienic Treatment: Have the patient well clad with good flannel covering the body. This flannel should always be kept on all children till they pass the second summer. Full supply of sterile water. All articles that human ingenuity has devised to passify and tickle the mouths of children for the purpose of keeping the child quiet should be severely condemned and absolutely prohibited both for well and sick children. These abommable passies have been the direct cause of making many children sick unto death by furnishing the medium through

which germs enter the ailmentary canal. Patient should be kept in a well ventilated room at the same time a room well warmed so as to keep the circulation free and equitable. Medical Treatment: My usual plan in whatever stage I find the case is to clear out the alimentary canal well, with repeated small doses of calomel, castor oil or salines, the first two the best. Then with bismuth subnit and small doses of tr. opii. camp., control the pain in the intestines; . stop paristalsis, control the bowel movement and withold foods and let the gut get well—which if seen in the beginning, is properly and persistently managed will soon get well. If the cases has passed the simple catarrhal form and blood appears on the napkin, I use 1-10 grain doses nitrate silver every 6 hours in milk sugar. Push the bisnuth and tr. opi. camp., and wash out the colon and rectum with hydrogen dioxide-boracic acid and if the actions are very frequent with large amounts of mucus and blood I use nitrate silver five to ten grains to pint of water and by means of a catheber well up into the colon let it flow with little force so as to reach the affected surface. I have often seen very marked benefit from just one application of the silver. This is the form that usually becomes chronic and for months the greatest care is to be observed. The blood ceases to appear, the mucus diminshes in quantity but does not entirely disappear. The dejections now have a dark brown appearance, very offensive odor and undigested food. Medicine does not play a very important role, but tonics such as iron, arsenic and hyphosphites will be beneficial. The strictest care and persistent attention to the feeding is the all important plan in the treatment. Only this will after months of distressing sickness at last bring the case to a favorable termination.

Some Remarks on Digestive Disturbances.

By John N. Upsher, M. D., Richmond, Va., Ex-President Richmond Academy of Medicine and Surgery. Ex-President and Honorary Fellow of the Tri-State Medical Association of the Carolinas and Virginia. Ex-President and Honorary Fellow of the State Medical Society of Virginia &c.

A misapprehension of the physiologic conditions which enter into the process of digestion is the explanation for much of the lack of success which falls to the lot of many men who fail in relieving the pathologic conditions with which they have to deal, and because a system of irrational guessing in the exhibition of remedies, instead of a rational therapy. Nor is it a failure to rightly understand the physiologic conditions alone, but also, either, a superficial or blundering examination into the digestive disturbance sought to be remedied. The cause of digestive disturbance are proximate or remote, located in the stomach itself, or the result of reflex disturbance from some remote organ. Or it may be due to causes without the body, as when we have gastric dilitation or misplacement as the result of the corset abuse. The influence of abuse of the stomach from the food standpoint must not be overlooked. The character of food, the time of eating, manner of eating including the process of mastication and insalivation, undue haste at meals, etc.

It must be remembered that the first meal of the day comes after a period of rest, when the stomach has not fully aroused from the dormant state of the previous night, and demands that the meal should be of such quality as to save any undue strain on the digestive process. The second meal comes at

such an hour as the functions of the body and the digestive organs especially are most active and vigorous. The modern plan of a light lunch at midday, and then dinner in the evening after the day's work is over, I believe is all wrong. It must be remembered that the body has endured the strain and fatigue of the day, when it has the heaviest and most exacting work put upon it, therefore digestion must be slower, and probably is not completed before bed-time. Nor is this the sole difficulty, active mental effort, especially if the effort is attended with anxiety of unusual strain, exercises an inhibing influence on the gastric muscle, thus interfering with proper motility of the organ, and directly causing fermentitive change, because digested or dissolved matters are left in the stomach. The stomach fails to get the period of rest to which it is entitled and awakens in the morning tired and debilitated, and so incapacitated for the work of the day. The subject fails to understand the lack of energy and enui of which he is conscious, and the day becomes a repetition of its predecessor. The fact that there are three stages of digestion must not be overlooked.". The first stage lasts from fifteen to forty minutes; in it the acidity of the contents is always rising, but the hydrochloric acid which is being secreted, enters into combination with the salts and with the proteids of the food. No free hydrochloric acid can be detected. The lactic acid may be contained in the food itself, or arise from the action of micro-organisms in it. As the acidity is chiefly composed of hydrochloric acid combined with proteid bodies, it exerts only a weak antiseptic action, and lactic acid forming organisms can flourish unchecked. In the second stage, the hydrochloric acid is still being secreted, and the total acidity of the contents continues to rise, while free hydrochloric acid can now be detected. That is to say, that more hydrochloric is being secreted than can combine at once with the proteids present. The antiseptic action of the free hydrochloric acid checks the lactic acid fermentation, and the lactic acid soon disappears.

The third stage follows after maximum acidity has been attained, and when much of the gastric contents have been propelled through the pyloric orifice. In this stage, the hydrochloric acid combined with the proteids is diminished in quantity, the total acidity falls, while there is a much larger proportion of free hydrochloric acid present. The duration of these three stages varies with the kind of food taken. The average time is *fifteen* to *forty minutes for the first stage;* second stage *forty minutes to five hours; third stage, from two to five hours till emptying of the stomach, after digestion is complete.*" (Gillespie.)

The three essential factors in the process of digestion are that it must be prompt, painless and complete. Failure of any one of these, engrafts a pathologic condition. Supplemental to what I have said, I would direct attention to a cause of digestive disturbance, especially in children. Adenoid growths in the throat, especially if neglected, throwing off as they do tenacious mucous secretion, which being swallowed by the child forms a source of ferment and also causes gastric debility by the continuous futile effort to digest it. Lack of space forbids that I do more than outline the necessary therapy for the relief and cure of these disturbances. The fundamental principle is to ascertain the cause and address the remedies to its removal. A correct dietary is essential, and must be based upon

an analysis of the gastric contents after a test meal. In the exhibition of drugs, I know of none better than *strychnine in full dosage*. Muriatic acid in appropriate cases, condurango as an astringent bitter, with the simpler bitters in combination. In cases due to gastric catarrh a preliminary exhibition of sodium phosphate, given *in hot water* is very useful. Attention to the bowels must not be overlooked, but there *must be a full and satisfactory action every day*, procured if possible by some simple means. Of the use of digestive ferments, I can only speak in a spirit of skepticism which has grown and strengthened with increasing experience. The liquid pepsins form a good vehicle for other agents, that is the best I can say for them. No man knows how much gastric juice is secreted in the digestion of a meal. Like the water running over a mill-wheel it is poured out until digestion is completed and then ceases. The drachm of liquid pepsin, or few grains of solid pepsin put into the stomach as a digestive, in a viscus that will hold a quart is simply lost. Finally in obstinate cases, we have recourse to gastric lavage, useful from the standpoint of removal of undigested matter, the stopping of fermentation, and is a method of healthful massage to the stomach muscle. Electricity (Faradic), as strong a current as can be borne, and applied by means of an intra-gastric electrode, will be found of benefit as a useful adjuvant to other means.

Summer Diarrhoea in Children.

By R. E. Mason, M. D., A. M. A., North Carolina, Mecklenburg and Charlotte Medical Socities.

In this article I will take up acute gastro-enteritis and entero-colitis only, with my experience as to causes, symptoms and treatment.

Causes.—The causes of the first, which is the usual form of summer diarrhœa in children, are exciting causes, such as too frequent and overfeeding, ingestion of cow's milk, solid food to children who should have milk diet, unripe fruit and fruits containing many seed, which cause irritation, mechanically, and by fermentation, followed by inflammation if not relieved.

In addition to these exciting causes we have the predisposing causes of warm weather, which is debilitating, as well as causing an increased number of bacteria in and on food and a chronic weakness of the digestive apparatus.

The cause of entero-colitis, as a rule, is a neglected diarrhœa, allowing what was first an irritation to become an inflammation, which by extension also involves the colon.

Symptoms.—The symptoms of acute gastro-enteritis depend in a great measure on what part of the digestive tract is most involved. If the stomach is the seat of greatest lesion then we have vomiting, thirst, loss of appetite, coated tongue as the most prominent, and the diarrhœa a secondary symptom.

If the intestine is the chief seat, the vomiting, thirst and loss of appetite are not so constant, and instead we have a greater amount of diarrhœa, tympanites, borborygmus, colicy pain, flatus and mucus than in the first case.

The stools in this affection are at first mushy, later more fluid, yellow or greenish in color and contain indigested food, mucus intimately mixed with the faeces, epithelial cells, usually alkaline in reaction and offensive in odor.

The symptoms of entero-colitis following a neglected diarrhœa are tympanites, tenderness along colon, increased number of stools with consequently smaller actions, preceded by

greater pain, tenesmus,, increase in amount of mucus (sometimes blood) until the actions are almost entirely mucus, loss of strength, pallor and extreme wasting.

Treatment.—In acute gastro-enteritis stop all food for 24 to 48 hours. Wash out bowel with normal salt solution. Give 1-10 to 1-5 gr. of calomel every hour until one-half to one grain (according to age of child) has been taken, followed by a dose of castor oil if bowels have not moved freely. If vomiting is present the calomel, by mouth, with a meak mustard or spice plaster to the epigastrium and the withdrawal of food will usually relieve. Give pure water often, but in small quantities.

As the parents, as a rule, do not seem to comprehend the necessity of stomachic rest, to prevent them feeding the little patient, order, after the first six or eight hours, albumin water (white of one egg to four ounces of water), two to three dramchs every three hours. Barley water may be given instead in the same dose and interval. After the bowels have been thoroughly cleared of the undigested, fermented, irritating mass, give the following:

Rx—Bismuth Sub. Nit., dr. 3 to 6.
Pepsin (pure scale), dr. ½.
Elixir Lactopeptine, p. s. oz. 3.
Sig.—Shake. Teaspoonful every 3 hours after feeding.

By ordering medicine given *after* feeding the parents will give food at the proper time, only.

Of course, special attention must be given to feeding, as it is a well known fact that if the child is purged and starved then a suitable diet given the diarrhœa is usually cured. If the child is bottle fed, the milk should be diluted with four to six parts of barley water or lime water. If the child suckles, restrict the amount and frequency of milk taken.

If this treatment is not effective, then in addition to these measures, use intestinal antiseptics, as salol or the combined sulphocarbolates in one to two grain doses every two to four hours, until the actions are free from odor. As long as the actions are offensive alkalies should be continued, bismuth sub. nit. being one of the best.

In these continued cases brandy, internally, and cod liver oil injunctions will probably be indicated.

Preparations of opium and intestinal antiseptics are seldom indicated in acute cases.

In entero-colitis the above treatment may be indicated, but local treatment must also be used. Flushing out the bowel with copious solutions of lysol or creolin twice daily, using an irrigation tube, has been most successful in my hands.

In this disease, as in all chronic diarrhœal diseases, the child living in the city must be taken to the country where it can be in the open air and shade in the fore and afternoon. During the heat of the day a bath will be most acceptable. Inunctions of cocoa butter or cod liver oil should be used, and for the rectal tenemus starch water with five to ten drops of Tr. Opii. seems to act best.

Resume.—Simple diarrhœa is usually cured by stomachic rest for 24 to 48 hours, calomel purge and proper diet. Intestinal antiseptics and preparations of opium are seldom indicated.

In entero-colitis antiseptics, astringents and preparations of opium are almost, if not always, indicated locally.

In all chronic intestinal diseases removal of patient to country and very often the use of stimulants and inunctions of fats are indicated.

Cholera Infantum: Its Treatment and Cure by Obtaining and Maintaining Intestinal Asepsis.

By Dr. W. C. Abbott, Chicago, Ill.

We have now to turn from our flannels, hot-packs and all the paraphernalia of pneumonia and winter diseases to get ready for another campaign against the "old (summer) enemy"—cholera infantum and the hot-weather disorders of infancy and childhood. Few of us can attend the first case of the season without feeling that we have entered upon a fight which will strain our resources to the utmost before we can feel assured of victory.

In the past the writer—like most of his *confreres*—met defeat more often than he triumphed, and, alas! when he *did* win what an empty victory it seemed! The little patient lay stretched out on its pillow wan, thin and barely alive. In most cases the ravages of the disease were apparent for months after the attack. And the fatal "second season.!"

How often have we lost then, those we saved the first year! Why it is that the child who escapes death from cholera-infantum one summer should almost invariably have a more severe attack the subsequent season is hard to explain, but it is so notwithstanding.

Not a man who has practiced five years but has been through this experience. Year after year we have quit disgusted and vowed that before the summer came round again we would read up and try to perfect some treatment which would prove really effective. The time came; we tried some much-lauded remedy or system—and we signed the death certificates just as regularly. Three or four years ago the writer tried, for the first time, a new method which enabled him to go through a busy season with only one death, and since then he has ceased entirely to dread cholera infantum, provided he can see the case fairly early and have his instructions followed absolutely. That the latter is essential is evidenced from this case. A child of 11months had come close to death's door before I saw it. After two days of the hardest kind of struggle I was able to say "the child is safe," adding the proviso—"*if* you give no milk whatsovere for 24 hours."

Stools had ceased, vomiting was stopped and the child was assuming a natural tint. The temperature was even and normal. When this stage arrives safety is assured, provided a new toxemia is not set up. The grandmother of the child pooh-poohed my ideas, and said "if the child wasn't fed it couldn't live; that the barley water on which it was flourishing was 'slop' and that she, having" brought up ten children of her own and one foundling, "knew more about feeding babies than any doctor." So the child got milk—lots of it—and the next morning (it was 90 in the shade) the diarrhœa came back; the vomiting and straining began and when I did arrive the pulsation at vertex was like a water hammer and the child was blue and presented every sign of rapidly approaching dissolution. I took off my coat and washed out the intestine with a cool antiseptic solution; fed the infant, drop by drop, meat juice, predigested gruel and albumin water and did everything which might stave off the end, but it came with night; and the granny did it with her milk.

There is no question but that cholera infantum is, first and foremost, a toxemia; a toxemia, moreover, which affects the entire system of the infant at a time when resistance is at its lowest. These toxins are generated in milk. Not always before it is swallowed (though this is often the case), but after inges-

tion. The bacilli which cause the fermentative state are present in the digestive tract and as soon as milk is provided they have a culture medium to their liking and flourish accordingly. Soon we get the well-known symptoms, mild at first, but rapidly increasing in severity, and within forty-eight hours we have a case of systemic poisoning with but little chance for warding off destruction.

We do not know just how these toxins are formed, and it is really a matter of secondary importance to know. The main thing is to recognize that the infant has been invaded by bacteria that propagate at an alarmingly rapid rate and the symptoms we are called upon to relieve are the efforts of nature to rid herself of these deadly enemies. Totally blind to this fact the old style practitioner gave an opiate and thus paralyzed the eliminative forces and so made death certain. Who does not remember the cases in which, after the administration of a few doses of astringents and opiates, we found the flux stopped and considered all was well? And then, who does not remember the sudden death from "brain involvement," as it was termed? If my readers have not seen such cases they never treated cholera infantum by the old and accepted methods.

To-day we have changed all that. We first of all give small doses of calomel and podophyllin, probably gr. 1-10 of the first and 1-12 of the latter, every half hour for four doses. Then we put a teaspoonful of magnesia sulphate (the saline laxative of the alkaloidists is the best prepaartion) into a glass of water (boiled). This is sweetened and flavored with lemon and a few spoonsful are given every few minutes. The bowel is washed out (after two or three motions have passed) with a cool alkaline, antiseptic solution. A most excellent formula is: One intestinal antiseptic tablet (Abbott formula) to one pint of water. If much mucous is present I give a prior injection of H_2O_2 (one part to thirty of water) and follow with the other solution. This should be thrown well up into the bowel with a catheter. This can be attached to a fountain syringe tube with the glass part of a dropper. Keep the bag about three to four feet above the anus; throw in as much as will be retained; keep it in by pressure over anus for a few minutes then let it come away. You will be surprised at the filth you will see. Now every hour give gr. 5 of the triple sulphocarbolates (intestinal antiseptic W. A.) crushed on the tongue or in solution. Give this till the stools are black then continue three grains an hour till they become a yellow slate tint and free from odor. This means a steril bowel and a cured child. Two grains every three hours will maintain the condition—if you keep milk out of the stomach. The first thing to do *is stop all milk.* Give the infant barley or albumin water and ten drops of bovinine every hour. Allow the latter to trickle down the throat dropping it in mouth with a dropper. Barley water must be made with pearl barley and properly. Take a half cup of barley and allow it to boil slowin in 2 quarts of water till 3 pints or less remain. Strain and add another pint of water, reboil for a few minutes, add a little sugar and feed to the child. Keep any nipples in a strong antiseptic solution and boil the bottle after use each time. Pure boiled water may be given—a teaspoonful at a time with advantage, for remember this is a malady which drains the system of fluids. Give two to four drops of nuclein every three hours. This may be dropped in the water. Al-

bumin water is made by stirring the white of an egg (fresh) slowly into a glass of water. Sweeten with sacharin. It is better to use this than sugar all through. If there is pain or tenesmus an anodyne for infants (nickle bromido. gr. 1-134; codeim sulph. gr. 1-67; powd. ipecac gr. 1-134; lith. carbon. gr. 1-25; oil anise. glt. 1-134.) will if given every half hour for three or four doses control the condition and bring sleep. Fever will subside as soon as you have a clean bowel, but if high give a few doses of aconitine. Into a glass put twenty teaspoonsful of water: Add one granule of aconitine for each year of the child's age, and one for the glass: Add six Anodyus for Infants, and one or two Brucine gr. 1-34. Of this give a teaspoonful every hour till fever and colic cease. But remember the main thing is to attain *a clean tractus intestinalis.*

If you are called late give promptly bovvinine ten drops, 1-134 strychnine and one cactin granule—in solution. Apply hot cloths to the abdomen, cold to the head and mustard water (hot) to feet. A high enema (hot or cold as condition warrants) of normal saline solution and the intestinal antiseptic "to effect." At this stage nuclein hypodermically is imperative. The system is almost conquered: the toxins have run riot and life wavers. You must support vitality, maintain asepsis and stimulate phagocytic action. No real food will do good because digestion has ceased. Bovinine drop by drop, rectal nutriment (after cleansing bowel) and fresh butter rubbed in well under arms and on inner surface of thighs together with a little pre-digested cereal gruel as the child advances will be the right thing. Keep all these cases in the fresh air, but avoid strong sun. One warm wrap (loose) is better than much clothing. Keep the infant bathed, and wash out mouth after each dose of medicine or feeding.

As convalescence comes "go slow," feel your way and on no account allow milk in any form for three days after recovery. Then begin in a very dilute form. Use barley water as a diluent.

Brandy is not called for except in extremis and then aromatic spirits of ammonia will do better work. If you cannot get bovinine get a piece of fresh steak and squeeze out the juice with a lemon squeezer. Add to each thirty drops four drops of a ten per cent. boric acid solution and flip a papyotin (popoid) granule into the child's mouth after you give this.

In extremis put the infant into a hot water bath up to its neck, give a hypodermic of strychnine and digitalis and drop by drop, bovinine one part, normal saline solution one part and to each teaspoonful of this ten drops of good cognac. Or follow the beef solution with aromatic spirits of amonia. Throw into the bowel hot saline solution and try to retain it by pressure. As soon as you have a turn for the better nurse the child along as indications will suggest. Follow the treatment outlined and you won't regret it. Older children want a prompt emptying of the bowel, atropine and strychnine for pain and free enemas. Then the intestinal antiseptic and barley water or boiled rice. A granule or two of cotoin (tonic astringent) may be used as soon as stools are sweet. Beware of relapses—they are more dangerous than the first attack.

ABSTRACTS.

The Treatment of Serious Effusions.

Abstract of a Clinical Lecture Deliveren at the Liverpool Royal Infirmary. By Jas. Barr, M. D., F. R C. P.

(*The British Medical Journal Mar. 19, 1094.*)

The author describes what is evidently a new method of treating serious effusions. The idea occurred to him to inject one fluidrachm of adrenalin chloride solution into the pleural sac, in a case of abdominal cancer extending to the pleura, after the aspiration of a large quantity of bloody serum, the object of the injection being to lessen the secretion. There was no further secretion, consequently no further tapping and the patient spent the remainder of her life in perfect comfort so far as her chest was concerned.

This treatment was extended to cases of ascites due to hepatic cirrhosis in which marked results were not expected. However, the rapidity of secretion was diminished and no ill effects were noted, the quantity of adrenalin solution used varied from two to three fluidrachms.

In a case of pericarditis with effusion, in a lad, 19 fluidounces of serem was withdrawn from the pericardium, but a reaccumulation rapidly followed. The patient's condition becoming critical the paracentesis was repeated, 20 ounces of fluid being withdrawn with immediate improvement in the quality of the pulse. Forty minims of solution adranalin chloride, 1-1000, was injected into the pericardium. The pulse at the wrist disappeared, the boy became of an ashy leaden hue and had an anxious expression. Immediately nitroglycerin and atropin were administered and the boy quickly rallied. No further tapping was required. The same patient had a subsequent attack of left pleurisy with effusion. Ten fluidounces of serum was withdrawn from the chest and one fluidrachm of adrenalin chloride solution was injected. There was no reaccumulation.

In a case of tuberculous peritonitis and ascites 200 fluidounces of serum was drawn and two fluidrachms of solution adrenalin chloride introduced into the peritoneal cavity, with four pints of aseptic air (to prevent adhesions). Thirteen days later 237 fluidounces of serum was withdrawn and two fluidrachms of adrenalin chloride solution and two pints of air were injected. Upon a third occasion, eleven days later, 196 fluidounces of serum was obtained by tapping, and three fluidrachms of adrenalin chloride solution and four pints of sterile air were injected. No reaccumulation of fluid occurred.

A female child of seven years was the next patient. One pint of fluid was withdrawn from her pleural cavity and one fluidrachm of adrenalin chloride solution and half a pint of sterile air were injected. Though it was highly probable that the pleurisy was tuberculous there was no reaccumulation of fluid and the patient recovered.

Irrigation in Entero-Colitis.

The Therapeutic Gazette of July publishes a timely article of interest by S. A. Visanska, of Atlanta, Ga., on Entero-Colitis in which the writer states: "Being called to a case of this type four things are to be considered. (1) To assist the effort which nature is making to free the stomach and intestine from the poison that is in them. (2) To restore the surface circulation. (3) To supply water to the tissues which are

being drained to so great an extent. (4) To support the strength until the disease has run its course. It must be born in mind when considering our treatment, that we first have extreme irritation of the parts causing increased peristalsis and later vaso-motor paralysis, with great transudation of serum. The condition of the membrane is such that absorption of drugs does not take place readily and in that the digestive functions fail to act, therefore food of any kind adds fuel to the fire. You are dealing with a poison more deadly than arsenic. Remove the poison from the alimentary canal as far as possible. Lavage of the stomach and intestine should be done at once. Delay is dangerous. Follow the irrigation of the stomach with three grains of calomel for its anti-fermentative action in the small intestines which are inaccessible by the process of irrigation. For the colon flushing warm saline solution may be used. Do not be afraid to give Bismuth; small doses are useless." Glyco-Thymoline in 10 per cent. solution is found most advantageous in these cases, correcting the active symptoms due to the absorption of toxins forming in the decomposing food substances, washing away all putrefactive products, correcting existing fermentation and rendering the tract unsuitable for the further propagation of pathogenic bacteria.

A recent case occurring in the practice of J. F. Howe, M. D., of Brooklyn, N. Y., bears with interest on this subject. Baby 15 months old, presented sudden fretfulness, drawing up of knees, tense knotted abdomen, and considerable jactitation. Case resembled colic (Enteritis). Vomiting and frequent diarrhoea soon developed, stools a yellowish green, evidencing considerable intestinal irritation; great prostration, temperature 101 degrees F. I ordered Glyco-Tnymoline and Liq. Bismuth equal parts, to be given at first every two hours. Noted some blood streaks in passage and ordered a colon flush with a 10 per cent. solution of Glyco-Thymoline in warm water. After six hours there was evidence of a change. Child became more quiet, vomiting was checked. On the second day I found the passage reduced to one-half the number and on the fourth day patient was practically well.

The Serum Treatment of Hay Fever.

Somers, (*Medicine*) writes of this subject elucidating the Dunbar theory of the disease. After treating ten cases by the use of the anti-follen toxin as suggested by Dunbar's labors in the etiology of the disease, he arrives at the following conclusions.

1. The serum produces prompt and positive amelioration of the symptoms in the majority of the cases.

2. In a smaller number this favorable result is soon accompanied with the complete disappearance of the affection.

3. Where slight or no action is seen after its use follen as an etiological factor does not predominate.

4. Where results are obtained it favorably influences all the manifestations of hay-fever.

5. While I am unable to state from personal experience the effect of the serum upon hay-fever occurring at other times of the year, or its effect when administered in advance of the attack, yet when given during the attack irrespective of its severity it produces marked palliation rather than absolute cure.

6. Its effects upon future attacks remains as yet unknown.

7. The serum in powder form is slightly soothing to the nasal mucosa, has but little effect upon the other

symptoms of the affection, and in occasional cases it may act as a direct irritant.

Finally as a result of larger experience with hay-fever occurring at other times of the year, it may become necessary to modify some of the opinions in regard to this antitoxin.

Cystitis.

Dowd (*Buffalo Med. Journal*). There are two varieties of cystitis, involvement of the mucus membrane and submucus tissue, and instertitial or involvement of the deeper layers of the bladder walls. Three factors are present: (a) A weakened or damaged condition of the tissues. (b) Pyogenic bacteria. (c) A medium for their development. Congestion weakens the tissues and the usual forms of bacteria are strepto—and staphyloccci, colon bacilli, urobacillus liquefacious septicus, tubercle bacilli and gonococci. Three important sypmtoms—frequency of urination, pain and pus in the urine. There are others of minor importance. The treatment should be directed to (1) cause; (2) relief of distressing symptoms; (3) rendering the urine bland and unirritating; (4) control of inflammatory process; (5) general treatment.

The cause should always be ascertained, though the indiscriminate use of the sand to search for foreign bodies in an inflamed bladder is condemned. The condition of urine will generally show the conditions present. Where stricture or stone is known to exist an operation should be performed at once. In suitable cases the bladder is washed out with solutions of silver nitrate of varying strength—1-16000to 1-8000—ureseptin hyociamus, belladona, morphia creasote vaherinate are given internally. The washing should be accomplished without the use of a catheter, by the aid of an Ultzmann-Dowd Syringe.

The Treatment of Remittent and Intermittent Fevers.

There was a symposium in the January number of *The Therapeutic Gazette* on "The Treatment of Remittent and Intermittent Fevers" by Southern authors. Dr. S. Harris in speaking of the individual prophylaxis states that in infected localities it is advisable for every one to sleep under mosquito bars or in carefully screened houses from early spring until winter has well begun. That in order to avoid infecting other members of the family or the community a patient suffering from malaria in any form should be placed under a mosquito bar as soon as the diagnosis of malaria is suspected. That it is just as much the duty of the physician to instruct a family, when one of its members is infected with malaria, regarding the methods to be employed to prevent others from becoming infected, as he does in cases of tuberculosis or typhoid fever. He gives quinine as a prophylatic in doses of 3-5 grains night and morning. During the disease he finds that quinine acts, but when given in small doses, 3-5 grains every 3-4 hours rather than a single large dose just before the expected paroxysm.

All of the authors are agreed on the use of calomel in the beginning. Dr. West states that it is an instering fact that long before the *modus operandi* of the salts of cinchona was known that clinical experience had established the same rules as has since been formulated. He quotes the following from the older text books:

(1) The necessity of administering this remedy after the subsidence of the

paroxysms; (2) of giving it in large doses; (3) of giving it in solution with the addition of some of the strong acids, some of the authorities advising the use of one large dose of quinine (say about 15 to 30 grains) immediately after the sweating stage; (4) of resorting to a change of climate in chronic cases; (5) the use, in many cases, of an emetic; (6) the use of mercurial purgatives; (7) the use of much larger doses of quinine than ordinary in the treatment of pernicious cases; and (8) the necessity of stimulative measures to bring about a reaction in the cold stage of pernicious forms.

Diphtheria--Its Diagnosis and Treatment.

(*Texas Medical Journal.*)

M. B. Grace states that in a typical case both the diagnosis and treatment is easy. All agree to isolate and nearly all agree on the antitoxin treatment. To the children who have been exposed administer 300-500 units, order a bath and change of clothing and usually you expect recovery for the patient and continued good health for those exposed. In the mild cases the child may have a normal temperature or perhaps 99½, some lassitude and a white patch on one or both tonsils that may or may not be easily removed. The diagnosis in this class of cases is most important, because the lives of other children as well as the patient, and the reputation of the physician depend upon the accuracy of the diagnosis. Neither with or without a bacteriological examination can one state positively that it is not diphtheria for frequently early in the disease we fail to find the Klebs-Loefler bacillus when a few days later the culture shows them unmistakably. He asks would it not be better in all such cases to state to the family that the diagnosis was not quite clear, and that diphtheria often begins in that way, and that all such cases are to be regarded with grave suspicion until they have proven themselves.

Observation on the Quality of Day and Night Urine.

(*New York and Philadelphia Medical Journal.*)

Chas. W. Edmunds conducted a number of observations on 56 cases to determine the variations between day and night urine in disease. He divided the periods from 7 a. m. to 7 p. m. and from 7 p. m. to 7 a. m. He found that in health twice as much urine was passed during the day period. He quotes a number of authorities to show that in renal and cardiac disease more urine was passed during the night than during the day. That the greatest nightly polyuria occurs in cases of myocarditis; nervous tachycardia does not give nightly polyuria, and it will serve to aid the diagnosis between organic and non-organic diseases of the heart; acute parenchymatous nephritis does not give so great a disturbance as chronic nephritis, especially if the latter is accompanied by a cardiac lesion, and this fact may serve in the diagnosis in the case where an acute nephritis develops in the course of an old or chronic renal lesion; and lastly, in cases with œdema, medicines (digitalis, diuretin, etc.) begin to provoke the polyuria with nocturnal predominance and, following, the quantity of night urine diminishes as the equilibrium in the circulation reappears.

Certowich considers the cause of the disturbance and argues that while the healthy man in full activity eliminates during the day 90 per cent. of fluid taken, and when confined to bed excretes 76 per cent., the subject of heart

disease during failure of compensation, and the nephritic only 30 to 50 per cent. of liquid taken in, therefore, the remainder accumulates in the body tissues and has a tendency to be excreted during the night, causing polyuria.

His conclusions from the study of his own cases are that the changes in a certain case from or toward the normal ratio are but expressions of the changes which took place in the patient's renal or cardiac condition, and therefore can be used as an index to his progress. He would (1) confirm the earlier writers' views as to the nocturnal polyuria occurring in renal and cardiac disease. (2) Point out the value of this fact as a diagnostic sign, especially in cardiac disease.

He would add (1) the possibility of tracing the course of a nephritis or of a cardiac disease by observing the changes in the relative amounts of day and night urine for short periods of time, and (2) when drugs which cause diuresis are administered during the day they tend to restore normal ratio.

The Result of Two Seasons Anti-Malarial Work.

Military Surgeons.

Lieutenant Russell gives an account of the work that has been done at Fort Washington, Md. The fort is located on the left bank of the Potomac thirteen miles below Washington and is surrounded on three sides with marshes and pools of stagnant water in which a host of mosquitoes were accustomed to breed. Nothing was done in the way of mosquito destruction up to July, 1901, when ordinary illuminating oil was used on the marshes and stagnant pools. The next year oil was spread over the breeding pools twice a month from the first of April up to the end of the season. In the way of permanent improvements a system of sub-soil drainage was undertaken by means of an eighteen inch steam sewer having numerous manholes for steam water and conducting into these manholes, a large number of three inch, porous tile drains laid from one to three feet below the surface. The marshes were converted into fertile bottoms suitable for gardens. There was comparative freedom from the swarms of culex. The anopheles appeared in considerable numbers late in the fall being bred in small pools in some marshy woodland which had not been drained. The improvement during the two years' work is shown in the average monthly sick report due to malaria which dropped from 19.53 per cent. to 8.63 per cent. during the first year and to 4.18 per cent. during the last year and from 51.81 per cent. in October, 1898, to 10.69 per cent. for October, 1902.

Significance of Pain in The Epigastrium.

(*Murdoch in Med. News.*)

Pain in epigastrium may be due to hyperacidity, hypersecretion, hyperasthesia of the stomach, nervous gastralgia, biliary colic, certain affections of the spinal cord, cancer, gastric ulcer, pancreatitis, some forms of appendicitis and Addison's disease.

Hypercacidity produces pain one or two hours after eating and ceases at the end of the digestive period. Ingestion of food or alkalies may temporarily relieve; sometimes tenderness, but pressure causes no actual pain.

The pain of periodic *hypersecretion* comes on suddenly in the midst of perfect health. There is thirst, vomiting hot sour fluid, stomach refills quickly, which is vomited, pulse grows feeble, extremities, cold and there is great exhaustion. It may last two or three days

and relief come suddenly and recovery be very rapid.

Hyperesthesis brings pain immediately upon eating, or even drinking a liquid, only partially relieved by vomiting; no circumscribed spot of tenderness; whole epigastrium sensitive to pressure.

In *nervous gastralgia* the pain is intense, sharply localized or diffuse; patients double up, avoid deep breathing, coughing or speaking aloud; face pale, disturbed and covered with cold sweat; may be collapse, sense of impending death and unconsciousness. Attacks may end suddenly with vomiting or recovery be gradual.

The attack in *biliary colic* is sudden chiefly referred to right hypochondrium and unbilical region; tenderness over gall bladder; pressure over abdomen may cause relief; chills and fever often present; vomiting does not relieve; jaundice apt to follow.

In the gastric crisis of *tabes* the pains begin in the groins, ascend on both sides of the abdomen, and become fixed in epigastrium, accompanied by incessant nausea and vomiting, vertigo and cardialgic pains of great intensity. These pains may be either at the beginning or end of the disease.

Cancer produces an almost uninterrupted pain, with remissions and exacerbatums; not localized to one spot, not dependent on taking food, and is not relieved by vomiting or completion of the process of digestion.

Gastric ulcer brings pain in ten to twenty minutes after eating, reaches its maximum in two hours and disappears on completion of gastric digestion, vomiting after meals affords relief. In rare cases with ulcer near pyloris or accompanied by hyperacid juice, the pain may be continuous.

Pain of *appendicitis* may commence in abdomen and epigastrium, but soon settles in right illiac region.

"Acute *panceratitis* is to be suspected when a previously healthy person or one suffering from occasional attacks of indigestion is suddenly seized with violent pain in the epigastrium, followed by vomiting and collapse, and in the course of 24 hours by a circumscribed smelling, tympanitic or resistent, with slight rise of temperature (Fitz.) No hard and fast lines can be drawn between acute and sub-acute forms; in sub-acute the collapse is not so sudden, there is likely to be constipation, which later gives place to diarrhoea. Temperature more regular—sometimes reaching 104 degrees or 105 degrees, yet pulse be 90 or 100; loss of flesh continues though other symptoms may be better Albuminuria is pretty constant.

There is often intense pain in epigastrium in *Addison's disease*, vacilate ing to the hypochondrial regions, so intense as to draw in all other symptoms. This is always preceded by a sense of weakness, exhaustion and lack of power, not in keeping with the robust appearance of the patient.

Venesection in Pneumonia.

Shank offers a plea (*Ther. Gaz.*, March, 1904) for the use of the lancet in pneumonia. Our forefathers did venesection empirically, in our times from advanced knowledge, we do it scientifically. Our pneumonia patients die from toxemia. Treatment should be directed to toward eliminating the toxins. The venesection should be done when the patient is being overcome by the toxins, regardless of whether it is the second or the eighth day, as shown by the rapid and weak state of the heart, the rapid shallow respiration, the anxious face and the cyanosis. Simultaneously with the bleeding we should in-

troduce into the cellular tissues normal salt solution of equal or greater volume than the amount of blood extracted. Thus a part of the toxins is eliminated and that which remains is diluted. This will bring a reaction and save some patients that would otherwise die.

Treatment of Pneumonia

(*Jour. A. M. A.*)

Thompson discusses the treatment of pneumonia and in conclusion emphasizes the following points:

1. The importance of not crowding an overtaxed heart with too much stimulation, and especially of basing the selection of the proper variety of cardiac stimulant on the existing balance between the conditions of vascular tone and the effort the heart is already making.

2. The uselessness of the so-called "specifics" for pneumonia, and, as a rule, of expectorants.

3. The importance of prevention of indigestion and particularly of tympanites.

4. The great value of hypodermoclysis in certain cases.

5. The uselessness of topical applications excepting for the purpose of relieving pleuritic pain.

6. The necessity of prescribing proper intervals of rest in which the patient is free from incessant efforts at medication.

Is Iodide of Potassium a Specific in Lobar Pneumonia?

(*Medical Record.*)

Altshul draws the following conclusions from treating sixty-two cases:

1. In none of the cases was there the least semblance of a crisis, the invariable termination being by lysis. This applies to both temperature and general condition of the patient. This gradual change is remarkable, as usually about 80 per cent. of the cases terminate by crisis. The most probable explanation of this difference seems to me to be that the antiseptic and bactericidal action of the drug inhibit the growth of the pneumococcus, hence here is a diminution of the toxins produced. These toxins being in circulation in but small quantity, their effect is readily counteracted. The control of the symptoms alone through the action of the drug is hardly sufficient explanation for the change from crisis to lysis.

2. In spite of the generally favorable action of the drug, the duration of the disease is not shortened.

3. The temperature even in cases of apical pneumonia was never very high, rarely exceeding 103 degrees, never above 104 degrees, when treatment was commenced early in the disease.

4. Complications, endocarditis, pericarditis, œdema, embolism, etc., were never met with. In one case, to be reported later, seen in consultation with Dr. L. Neumann of this city, a young woman with advanced phthisis developed a peritonitis; in the course of this a pneumonia appeared, and within forty-eight hours a meningitis. The lungs cleared entirely, the symptoms of meningitis had disappeared, and the patient was fairly on the road to recovery from the acute illness, when an intestinal paralysis, which had previously given considerable trouble, again set in and the patient died in consequence.

5. If the treatment was commenced within the first thirty-six hours after the initial chill the disease was at no time of the violent type with marked cerebral symptoms. If these symptoms were already present when the treatment was instituted they rapidly disappeared, usually within twenty-four

hours, and the patient, who previously was perhaps wildly delirious and intractable, became calm and rational. Headache was the exception, and when present was very slight and of short duration.

6. In all cases, the patient treated with the iodide seemed to feel very much more comfortable, and seemed less ill than usual.

Justifiableness of Exploratory Operations.

Smith condemns the habit (*Buffalo Medical Journal*) of indiscriminate exploratory operations as tending to make us less careful in diagnostic work, and placing too much dependence on the knife to determine pathological conditions. We should welcome every advance which makes diagnosis more certain, treatment more beneficial, and prognosis more exact. Laboratory and clinical methods have so advanced that diagnosis is more certain with the willing workers. When diagnostician and operator strive to make the knife the means of curing disease rather than diagnosing it, exploratory operation of the objectionable type will seldom occur. In conditions only to be treated surgically, an exploratory operation is justifiable when diagnosis is of minor importance. If the exploratory element (*i. e.,* to aid diagnosis) becomes more pronounced and the question of benefit to be derived from an operation more problematic, the decision of the justifiableness of the exploratory operations becomes more difficult. The justifiable exploratory operation is done on a case in which diagnosis or surgical indication is obscure, or in which both are obscure, but which promises possibility of benefit to the patient, and is indicated to relieve suffering or avert impending danger. Unjustifiable exploratory operations are done on cases in which diagnosis is obscure, or the surgical indication is weak, and which give small promise of benefit to the patient, by averting danger or lessening suffering. In the hands of the careless diagnostician unjustifiable exploratory operations are unnecessary, or useless or dangerous.

"In conclusion, we may sum up much that is discursive in a paper of this kind by stating that exploratory operations are unjustifiable and are not to be recommended in so far as they are undertaken without careful clinical study of the patient and without painstaking use of the laboratory aids within our reach, and when the surgical indication is not dependent on trouble in the region to be attacked. An error in judgment may lead a conscientious surgeon to make an occasional operation properly classed with unjustifiable exploratory operations. Habitual recourse to exploratory operations by a surgeon must result in many unjustifiable operations, and becomes an error in ethics."

Surgery of Hydrocephalus.

In the March issue of *American Journal of Surgery and Gynecology* Mr. Ricketts gives a short history of different operative measures for this trouble. Operations of various kinds have been performed for two centuries, but results have not been as pronounced as in other brain leisons. Hydrocephalus has not been produced artificially in lower animals, and experimented operations are limited. By carefully observing cases, performing operations and analizing and recording results the requisite knowledge of the pathologic changes may be obtained.

Puncture may be cranial, direct to remove the fluid through a canula in the lumbar spinal meninges (uncertain)

and subcutanteous by allowing the fluid to enter the sucutanteous tissue and be absorbed. One hundred and fifty papers have been contributed to this subject.

Compression by bandages of cloth adhesive strips, or rubber bands has been used since 1821 and many speak of in complimentary terms. Fifteen papers have been written on this plan of treatment.

Section or continuous drainage was first used in 1845, and good results obtained from its use. One hundred and thirty-four contributions have been contributed to this subject.

Injections of astingents, as iodine, zinc, etc., have been used since 1856, but without great success.

The medical, electrical and topical treatment is negative and should not be tolerated.

He reaches the following:

CONCLUSIONS.

1. Excessive secretion of the cerebral meninges may occur in any form of animal life.

2. The various forms of vegetable life are subject to excessive local or general secretion to a fatal degree.

3. Hydrocephalus, ventricular or meningeal, may develop in the uterus or at any time throughout infant or adult life.

4. The number of cases of spontaneous recovery in either are probably numerous, especially in infant life where the arachnoid is alone involved.

5. All cavities may unite with or without external rupture, when so it is usually fatal.

6. Spontaneous rupture may occur externally or subcutaneously with an occasional recovery.

7. The effusion may be into the lateral, third or fifth ventricle or it may be in the arachnoid cavity, one or all.

8. A clot in the arachnoid cavity may cause a cyst which will enlarge with all its consequences.

9. Syphilis and rickets have been assigned as causes of hydrocephalus, but such have never been proven; the cause is yet unknown.

10. Sometimes zones of new osseous material are seen scattered here and there in the meninges and sometimes upon or in the brain itself.

11. The septum lucidum is invariably thickened as are the cerebral meninges in general.

12. It is probably the greater number of cases of hydrocephalus whether of the third or fifth ventricle or of the arachnoid variety that can be cured by some form of drainage.

13. Continuous drainage by seton or the repeated use of the trocar has given the better results in the way of benefit or cure.

14. Spinal drainage has been practiced but a very limited degree and is, as yet, very undetermined.

15. Subcutaneous drainage has not as yet resulted in a cure, but there seems to be many possibilities for this method.

16. Trephining for drainage is only resorted to in cases where the fontanelles have been closed by bony union.

17. Results from drainage are more favorable if it is done when the presence of fluid is first detected.

18. It is sometimes necessary to drain both hemispheres together with the right and left cerebellar cavity.

19. The secret of curing arachnoid hydrocephalus by drainage probably lies in obliterating the arachnoid cavity. However, this can hardly be so with

hydrocephalus of the third, fourth and fifth ventricular variety.

20. The cardinal principle in this as ir all operations upon the brain is asepsis.

The Treatment of Fracture.

(Brooklyn Medical Journal.)

Warbasse states that the treatment of fracture requires, besides knowledge and experience, mechanical instinct, patience, perseverance, and a disposition to be satisfied with nothing but the best. The conditions are comparable to those of a wond of the soft parts, and the healing will be influenced by the niceness of the position of the wound surfaces, by the perfection of the immobilization of the wound, and by the nutrition of the parts. The surgeon should have before his eye a picture of the wound. This is the first step in the treatment. Time and pains in making a diagnosis are well spent. The value of comparison of the injured leg is emphasized, and he states that the X-ray has become an indispensable adjunct. He urges immediate reduction and immobilization with the help of an assistant, and the patient under a general anesthetic, if necessary. Gentleness in handling fractures in order that the soft parts may not be more seriously injured. He states that the swelling is largely due to imperfect immobilization and will stop as soon as properly encased in a plaster dressing, and that he has no hestancy in applying a plaster bandage to a fracture of both bones of the leg immediately after the accident and before any swelling has developed. Poor results occur from yielding to the whims and present comfort of the patient and a divided responsibility on the part of the two or more surgeons in attendance. If the patient is suffering with a fracture which is complicated by an irreducible displacement or pressure or injury to a nerve trunk he should not be deprived of the advantages which surgery can now offer him.

Gonnorrhœal Inflammation of Joints.

*(The International Journal of Surgery*Q

..Halstead states that, clinically gonorrhœal inflammation of joints may be grouped as follows:

1, Acute serous synovitis.

2. Acute sero-purulent synovitis (mixed infection).

3. Purulent synovitis (usually mixed staphylococcus and gonorrhœal infection).

4. Sero-fibrinous or the sero- membranous, of Olier, where the fluid is present in small amount, or has the consistency of coagulated serum or is gelatinous. This is often associated with a proliferative synovitis, and defects the cartiledge from prolonged inflammation. This form may be from the beginning subacute and not associated with the severe pain, as is common in other varieties. Not infrequently a considerable degree of periarticular inflammation is coincident.

5. The peri-articular, ankylosing inflammation, with practically no fluid in the joint cavity. In this group we have a low grade of inflammation, closely simulating arthritis deformans, and usually associated with considerable pain, marked muscular atrophy, and pronounced anemia. The temperature may be but slightly above the normal at any time. This, with the muscular atrophy, the anemia, and the spindle-shaped joint, may present a picture that simulates tuberculosis.

Practical Lessons From an Experience of More Than One Hundred Cases of Eclampsia.

(Therapeutic Gazette.)

Hirst states that there are three phases of the subject on which clinical experience throws valuable light: etiology, the premonitory signs, the preventive and the curative treatment. A maze of theories have been evolved, but there is no theory yet advanced which has the sound basis of common sense and is in with such accord with clinical observation as the long occupied view that the products of the fœtal metabolism discharged into the maternal blood and eventually eliminated by the maternal kidneys, are the chief predisposing cause of eclampsia, and that insufficient elimination by the maternal kidneys is the chief exciting cause. Anything which throws extra work on the kidneys, as the congestion of acute nephritis or pressure upon the ureters, a heavy nitrogenous diet, deficient activity of the skin and bowels. As a rule it is a disease of late pregnancy and is ten times more frequent in twin than single pregnancies. No view could be more harmful than the alleged fact that women with nephritis are not liable to eclampsia. The reason why a comparatively small percetage of them arrive at the convulsive stage of the disease are that abortion, miscarriage, and premature death of the fœtus is the rule; if patients are carefully dieted, artificial termination is often postponed.

Among the premonitory signs of eclampsia there is nothing comparable in value to the presence in considerable and increasing quantties of albumin in the filtered urine. Any one would be ill advised who attached much importance to urea elimination. Casts other than hyaline should be looked for. The preventive treatment consists of milk diet, diaphoresis, diuresis, and catrharsis. For the curative treament after extended and repeated trials of both plans, he directs his attention solely to the eclampsia without regard to the uterine contents, until such a degree of dilatation of the os occurs that delivery can be secured without violence. He prefers chloral to opium and uses veratrum vidride. He urges treatment in a properly appointed hospital, where the patient would have more than double the chance of recovery than she has in her own home.

Insomnia.

(Medical Record.)

Gorton states that the causes of sleeplessness are difficult to state in other than a general way. That all psychoses, mania and neurasthenia are usually preceded by sleeplessness. Alcohol and other excesses cause a toxic type of insomnia difficult to control. Mental worry, grief, over-fatigue, also tea, coffee and opium are all causes. In treatment the first consideration is the cause and its removal, if possible, that sleeplessness soon becomes a habit, and the longer established the more difficult it is of relief. He classifies the treatment under three different headings—dietetic, hygenic and medicinal. In many cases all that is necessary is a change of scene and environment. The hygenic treatment consists in the use of the various hydro-therapeutic measures, such as the warm full bath, cold pack, sitz bath, the cold rub, the ingestion of hot drinks, and the regulation of the mode of life. The medicinal treatment consists in that of the alimentary tract and the exhibition of medicines the more important being paraldehyde, trional, sulphonal, chloral and the bro-

mides. Paraldehyde is the hypnotic "par excellence" given in doses of two to three drachms and repeated in an hour if necessary.

Diabetes and Obscure Physiology.

(Jour. A. M. A.)

Assuming, then, the correctness in the main of all the experimental findings herein adduced,, the situation physiologically would appear thus:

1. That in normal blood dextrose undergoes chemical modification before absorption by the tissues.

2. That in normal blood alcohol develops from disintegration of dextrose.

3. That alcohol is present in minute quantities in the urine of total abstainers.

4. That in chemically pure solutions of dextrose and levulose treated with pancreatin, sugar is lost and alcohol (and carbonic acid?) developed, the change being more marked in the case of levulose.

5. That the agent responsible for the chemical reaction is an enzyme normally present in blood.

6. That this enzyme has its origin in the pancreas alone, for when that organ is removed dextrose remains unchanged.

7. That interference or disturbance of this function of the pancreas initiates a group of phenomena, known clinically as diabetes mellitus.

Hemmorrhagic Diseases of Children

Stonewall says (*Pediatrics*, March 1904.) purpura is the manifestation of a condition not well understood. It may be due (1) to vasoneurosis as in locomotor ataxia; (2) a drug, as iodide of potash; (3) infectious disease, as diptheria or smallpox; (4) a diathesis, as in rheumatism; (5) a special germ, and lastly (6) a toxin, as in enteritis or tainted food.

It complicates scarlatina, diphtheria, pneumonia, measles, appendicitis, and broncho pneumonia. Race gives no immunity. Jacobi says it is a fact of great importance that purpura hemorthagica, scurvy and morbus mænlosus are one and the same thing."

Bacteria of various kinds have been found in the blood of scurbutic patients, and there is strong presumption of its being of microbic origin, and a specific bacillus resembling anthax was claimed to have been isolated in 1889, but a specific germ has not yet been found for all cases.

In the treatment dietetics, especially giving the juice of oranges or lemons is as important as medicines. Calcium chloride increases the coagulability of the blood and checks hemorrhage. Vegetable acid, astringents, turpentine and arsenic are useful. Strypticin and the suprarenal gland are good. There is no specific remedy or antidote, but fruit acids and suprarenal gland are nearly so.

Sterility.

(Can. Pract. and Rev.)

The senior obstetric physician of Guy's Hospital, Dr. Peter Horrocks, publishes in the *Lancet*, of January 9, 1904, a lecture delivered by him before the Medical Graduates' College.

The lecture is an extremely valuable one, and concludes with a careful outline of treatment, from which we take the following points:

1. *No treatment* if the woman is healthy and has not been married three years. The chance of pregnancy is still good.

2. *Food and Exercise.*—Plenty of work or exercise; change of diet.

3. *Tonics.*—Use these freely to improve the general health.

4. *Change of Environment and Climate.*—Send to a warm climate *e. g.,* Cornwall, Devon, Malta, Italy, etc. Send back to her old home, etc.

5 *Specifics.*—In case of doubt give mercury or potassium iodide.

6. *Local treatment.*—Cure any excoriation, pruitus, etc. Remove caruncles, repair lacerations. Cure vaginitis, urethritis, endocervicitis, etc.

7. *Regulation of Coitus.*—Forbid excess.

8. *Natural habits.*—Stop douching, etc.

Iodo-Neucleoid or Organic Iodine.

Sydston has made some clinic and laboratory investigations on iodine compounds, reported in *Medicine* for March, 1894. Iodine compounds for internal medication should possess (1) the presence of iodine in sufficient quantity to be productive of physiologic effect; (2) the absence of irritating properties; (3) assimilability; (4) the absence of other chemical compounds which might directly or remotely interfere with the action of the iodine. Iodide of potash has heretofore come the nearest of the iodine compounds to fulfilling these requirements, but it is too bulky, not enough iodine to meet the indications, and too irritating to the stomach.

In the experiments alluded to, two patients were given iodide of potash, and iodo-neucleoid, respectively and fœces and unrine of each examined in the laboratory to determine the amount of iodine retained in the system. No iodine found in the feces of the patient taking iodo-neucleoid, and it was found and 8 per cent. of the iodine was retained in the patient taking iodide potash mixture and 64 per cent. in the case of the one taking the neucleoid mixture.

The following conclusions are reached by the author from clinical laboratory tests:

1. Iodo-neucleoid is a non-irritating, thoroughly assimiable preparation of iodine.

2. It is less likely to produce iodism from a given quantity of the contained iodine than any of the iodine salts I have used.

3. It is a perfectly stable preparation which can be administered in pill, capsule, tablet, or powder form.

4. While I am not prepared to state that it fills the role of iodide of potassium in every instance, I have no hesitation in affirming that in some cases which are intractable to the action of the iodide of potassium excellent results are obtained from iodo-nucleoid.

Forced Feeding of Consumptives.

Dr. H. M. Neal gives a resume of the treatment of pulmonary tuberculosis (*Penn. Med. Journal*), as practiced at the "Free Hospital for Poor Consumptives" at White Haven, Pa., in which he says: "All patients are required to take at least six raw eggs and three quarts of milk daily in addition to one full meal of solid food. They are urged to take more if possible, and most patients are able to accomplish more than this; some attain to as many as twelve eggs and seven quarts of milk per day in addition to one full meal and a light breakfast and supper. The full meal, or dinner, includes roast beef, several vegetables with light desert, such as fruit, ice cream, custard or pudding; an ordinary supper is one of boiled rice, stewed fruit, milk and eggs. For breakfast a cereal and fruit. Patients are not compelled to eat breakfast or

supper, but it is required that they take a full dinner.

"Eggs are taken as follows: Five drops of vinegar or lemon juice or vinegar in a glass, a fresh egg is broken into this, more vinegar or lemon juice is added and this is swallowed without beating." Milk should be fresh, of good specific gravity, but not necessarily containing a large amount of fat. If this diet constipates more eggs and milk are added—sometimes broken doses of calomel or salts are given. If diarrhœt is met with slight suspension of the forced feeding, cleaning off the bowels with castor oil and following with bismuth. Open air, sun baths, moderate exercise in suitable cases, some times during each day a period of complete rest, even to avoiding conversation or listening, and frequent bathing, are used as adjuncts. Consumptives are prone to use too much clothing, and this requires care. In medicines, creosote is used freely, commencing with five drops and gradually increase to thirty, forty or even fifty drops if it can be borne. It is preferable given in cold milk. Patients receive an inunction of the following:

Europhen, 2drs.
Ol. anise, 2 drs.
Ol. wintergreen, 2 drs.
Ol. rose, 2 gtt.
Ol olive, 5 ozs.

Persons with colds are kept away from consumptive patients as much as possible on account of their contagiousness and the bad results following. A digestive tonic is sometimes given in beginning the forced feeding. Heroin ½ gr. or heroin and terpinhydrate are given to control cough, but usually patients are instructed to avoid cough by exercise of will power. Creosote seems to have a tendency to produce hemorrhage, and must be watched. This tendency can sometimes be checked by the administration of 1-100 gr. nitro-glycerine.

While we do not cure consumption in all cases "enough has been gained to convince the ordinary mind that within the next quarter of a century we will see pulmonary tuberculosis a much less dreaded disease than it is to-day, even if it is not practically stamped out of existence."

House Infection of Tuberculosis.

Flick holds *(Med. News)* that tuberculosis is caused by micro-organism, and all disease caused by micro-organism are contagious. There are different ways of communicating contagious disease, and that of tuberculosis is by contact. The form of contact here is peculiar, in that to be infected a house is essential—infection being used in the broad sense of conveyance, and house in that of enclosure. The house is the depository of the tubercle outside his host, without the house it could not be preserved. Sunlight, air and water are its natural enemies. The consumptive—*i. e.*, the later stage of tuberculosis, seeks the house away from sunlight and air, and the tubercle is deposited in the house along with the streptococecus and the staphylococcus, which are protective environments. In the house, too, is the new victims, for the tubercle cannot thrive in robust, healthy tissue, but must have an organ injured by malnutrition or some other agency. The house facilitates the implantation of the tubercle by prolonged intimate contact with contaminated material and atmosphere. The dwelling house offers the most suitable environment for disseminating the bacillus, and the workship the next. Public buildings, as schools, churches, hotels, theatres, etc., offer the same danger, but the contact is not so



The Largest and Most Thoroughly Equipped of Sanitariums

The Battle Creek Sanitarium management were the first to organize a thoroughly complete system of physiological therapeutics. Water cures had existed before,—eclectic institutions, mineral springs, and similar establishments—but the Battle Creek Institution was the first to organize a system and method embodying all physiological agencies.

One hundred and seventy five rooms with private baths; six hydraulic elevators; electric lights and private telephone in each room.

Spacious parlors on every floor. Roof garden, dining-room and kitchen at the top Beautiful out-look from every window. Accommodations for eight hundred guests. Staff of thirty doctors; three hundred and fifty nurses.

Nearly forty years experience in this institution has demonstrated that the great majority of chronic invalids, of all classes, including many considered incurable, can be trained up to a state of healthful vigor by a systematic regimen based upon scientific principles, combined with a thorough-going application of the resource of hydrothrapy, phototherapy, thermotherapy, massage, Swedish movements, Swedish gymnastics, electrotherapy, and the open air treatment, guided by the exact findings of bacteriological, chemical, microscopical, and other accurate methods of examination.

Special ward for surgical cases with perfect appointments.

For information concerning the facilities afforded, terms, etc., address,

THE SANITARIUM, Battle Creek, Mich.

intimate or so prolonged here, and every one has some resisting power to the invasion and can handle a reasonable number of the bacilli.

"In studying the progress of civilization in the light of modern science, one is struck with the egregious blunders into which man has been led by his desire for privacy and comfort. He has built his house to keep out his enemies, to protect himself from heat and cold, and to screen himself from the curiosity of his neighbor. He has sought to make his house his castle, but in reality he has made it the place wherein he courts death.

"If man desires to free himself from the great white plague, he will have to retrace his steps from some of what he considers advanced points of civilization. He will have to learn, among other things, that fresh air is God's greatest gift on earth, and that whatever shuts out fresh air, shuts out health and happiness. In house infection he will find the key to the entire problem of stamping out tuberculosis.

The Siberian district of Tomsk is suffering from an epidemic of ergot poisoning. The rainy weather of the last harvest season favored the growth of ergot in the grain, and in tests of 92 samples of flour only 19 were found free from appreciable amounts of ergot. Already 123 cases and 14 deaths have been reported.

The Mexican government has decided to spend $7,000,000 during the present year to prevent a recurrence of yellow fever within its borders.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., MAY, 1904. No. 5

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

Advice to Young Doctors.

It is with an earnest desire to be helpful to those just entering, or but recently entered, upon the practice of medicine that this series of editorials is undertaken. It is to young doctors we write, and we propose indicting this part of our editorials personally to this class of the profession.

One of the first questions to be considered is why do you adopt the profession of medicine as a life calling? You should, if you have not already done so, seriously review the motives actuating you in the selection made. We trust you were not influenced by a caprice or whim in deciding upon this step, but that the incentive was one springing from a high aim, a grand, moral purpose or a laudable ambition. Anything short of such a stimulus demands extra effort and is donned to failure. If your aspirations do not partake of something of this nature as the goal for which you strive, and you cannot cultivate such sentiments, you have mistaken your vocation.

Medicine offers to the mental powers an almost unlimited scope of action. The three leading professions in learning—the ministry, the law and medicine—are often compared with each other. By general consent the ministry is accorded the first place in importance and influence, and its demands upon the intellect are recognized as being as great as either of the others. Precedence is given the law or medicine according to the bias of the adherents of the two professions. It is not my purpose to contrast the two professions in this connection; save only in the office of the minister of the gospel, we hold that medicine ranks supreme, as exemplified in the life and teachings of its true advocates; in nobility it takes precedence; in dignity it is peerless; in its study, its practice and its attributes it has no equal; in devotion to a high purpose, in self-sacrifice to the needs of suffering, in philanthrophy, in charity it is pre-eminent; in progress it is outstripping all other professions; in its benefactions to the human race, in its effort, in time, in talent the results obtained are world-wide wherever there is disease or pestilence or death.

As a training of the intellect and enlarging and broadening the mind it offers advantages superior to all other professions. If science is a search for truth, then is medicine the most scientific of all callings; it demands the highest order of intellect in its votaries and only the closest application to its teachings will win success; it is never fully mastered, but there is always more beyond, a better and a grander view for those who climb to its heights.

That but few reach the sublimest in the study of medicine makes it no less one of the grandest of the professions. The plodders, so long as true to the spirit of the profession, can still claim some of its glories. It is an honorable profession, and has been so considered for ages. Dr. Love, in a paper read before the Florida Medical Association *(Journal Am. Med. Association)*, has said this:

"Our profession has for ages been composed of men whose high sense of honor and integrity and whose moral and intellectual qualifications entitled them to a social standing second to no other class. The true physician has been, and is, clothed with habiliments of dignity which it becomes our duty to preserve and to hand to posterity in an unsullied state. The young man beginning his career as a physician receives as a heritage from his profession certain immunities, certain social rights and privileges and certain claims to the respect and esteem of his fellow beings, could only hope to win after years of unremitting devotion to the loftiest moral and ethical principles. It is this unsolicited and unearned inheritance which places the physician in the very springtime of his career under obligation to his profession."

Medicine is a jealous mistress and brooks no other love. An unswerving devotion and true loyalty are demanded. There is enough in it to occupy the energies of a lifetime and it is only to those willing to bestow unremitting labor in pursuit of its hidden treasures that true success is awarded.

It is beyond our power to give you a word picture of the ideal physician, but we shall attempt to portray some of the characteristics and attributes he should possess. The true physician should be an evenly balanced man. It would be better if there were no glaring defects at least in his physical appearance, and he must be in possession of all the perceptive powers. More important is that his mental faculties should be well poised, with no rough corners or pronounced peculiarities. The will power should be strong and associated with it an indomitable moral and physical courage. The exercise of these faculties will often be needed, and circumstances may arise when they will be taxed to their fullest extent. The mind of the physician should be well developed in the perceptive faculties that he may see quickly and grasp the salient points presented. The physician is preeminently a reasoner. Without the ability to take the different ideas or manifestations presented, arrange, digest and analize them so as to form a conclusion or judgment concerning them, he cannot attain to the dignity of a physician. It is essential that one be able to reason well, to form just conclusions and correct opinions from the premises, in order to become a physician. The relation of cause and effect are nowhere more pronounced than in the study of disease, and its consideration in no profession or calling more important.

The character of the members of the medical profession has ever been of a high order, and this is as it should be.

The relations of the profession to the public are such as to demand that its personnel be of unblemished character. The physician has access to the innermost recesses of the home; is often cognizant of the skeleton in the closet; has knowledge of the weakness and foibles of his fellowman; is present when a new soul is ushered into existence; appealed to in hours of direct distress, when pain racks the frame and fever scorches the brow and the grim monster hovers over the loved one; and when the brittle thread of life is sundered it may become his duty to offer the needed words of sympathy and comfort. Aye, yes, the physician's character should be above reproach and one to inspire confidence.

The practice of medicine is confined to no class or condition of people, and in sickness all the weaker elements of the nature are brought out. There will be a demand, often severely taxed, in the sick room for kindness, tenderness, patience, skill, tact and the power of infusing courage and confidence. The cultivation of these, even if present to high degree, cannot be too much insisted upon.

Probably the most important feature in the general make up of the doctor is the spirit with which he enters and follows his work. This should be of a high and noble character. The foundation of medicine is based upon truth—the study of facts and their correct application to disease. A desire to learn and know the truth, a willingness to labor for it, must be the main-spring of action, born of a broad humanity that seeks to allay suffering in any and all forms. A spirit of love of the work for the work's sake. That sacrifices of time in study and self in the application of the knowledge gained to the relief of disease should be predominant. There is no room for sordid motives in the life of the true physician. Ambition to excell is laudable everywhere, but in the practice of medicine ambition should be hedged within the boundaries of truth and philanthropy.

Though it is not granted to all to secure more than enough of this world's goods to satisfy the needs of life, yet it does not follow that such are unsuccessful. The doctor's mission is to minister to the sufferer, and he who does this to the best of his ability, who, by his life and character is a benediction to his fellowman, whose influence is for the uplifting of mankind, and who leaves the world better by having lived in it is a success.

The ideal may be unattainable, and we will admit that the members of the medical profession are not all endowed with the attributes here given. Many fall far short in one or more of the particulars. The tone and spirit of the profession are in the direction indicated. They can, and ought, to be cultivated.

Such a man or profession as I have depicted ought to command the full respect of the public. If not granted you can do more than win it—you can deserve it.

Treatment of the Over-Worked.

Man can accomplish great amounts of work and under favorable circumstances can continue under a large degree of strains for a long while, when the system demands an opportunity for recuperation, whatever organ first gives way under the great pressure often placed upon the system, there is always present in these cases indigestion in some form, and nervous disorders from a slight invitableness to those of the most pronounced character, as brain

fag or exhaustion, intractable insomnia, melancholic-insanity and suicide.

That worry has more to do with many of these cases than work pure and simple is not mild, but it is the long continued strain upon the system that brings the worry. In other words, the normal condition would be able to meet the situation without worry.

The treatment of these cases is unsatisfactory, largely from the inability of the physician to properly control the patient. Cessation from work—relaxation, change of scene and tonics will relieve the milder cases. Unfortunately it is not the milder cases that apply for relief, and irreparable injury to the mental and physical condition is often inflicted before the gravity of the situation is agnized. It is this class that go into the drug habits. A stimulant is needed to whip up the flagging energies, and alcohol, cocaine, quinine, opium or some other drug of like character is taken in increasing quantities. The newspapers tune with advertisements of medicines directed to the relief of these troubles, and the manufacturing chemist keeps the druggists' shelves filled with them, all of a stimulant and narcotic character. When the physician is consulted there is a deplorable state in the combination of ills presented.

The majority of these patients demand relief without interference with their usual vacations, and herein lies the greatest trouble. The demands of the patient's business is urged and the impossibility of leaving it insisted upon. The first step in the treatment is based upon the faith or confidence of the patient in the ability and integrity of the physician. It requires firmness of a high standard to insist upon a change of the manner of living in these patients, for a change there must be if a cure is effected, and success is largely obtained through the physician's ability to effect this change.

Medicine is of but little use. There must be a change more or less radical according to the degree of breakdown, from a regulation of the hours and amount of work to be done to a complete suspension of the ordinary vocations. Perhaps recreation is more essential than rest. New scenes are desirable—new impulses are to be created; the mind is to be drawn away from the business affairs. No good will be accomplished by any plan of treatment that permits the mind to be worried with the affairs of business. The patient with a fad for hunting or fishing, or some like pursuit that will give the physical man a degree of exercise, producing fatigue and at the same time direct the mind into new channels is fortunate. Tact in devising the necessary changes, and at the same time give the recreation so important will be required on the part of the physician.

The insomnia accompaning these troubles requires especial attention. Improvement is apt to follow natural refreshing sleep. Artificially produced sleep or sleep induced by hypnotics even when this can be easily accomplished, is better than no sleep, but is not as refreshing nor is it as beneficial as natural sleep. Normal sleep comes with muscular relaxation and mental concentration on the effort to sleep to the exclusion of all other matters. This may seem impossible, but any one with will power can, with practice and effort, accomplish it. There must first be a complete relaxation of the muscular system; every muscle must be quiet and at complete rest; the mind must be unconscious of the motor nervous system; so much for the physical part of sleep. Now let the mind be concentrated on the mode of sleep. If a person in deep

sleep or going off in sleep is observed it will be seen that the breathing is deeper and there is an element of rymth and regularity that is wanting when awake. If the mind is concentrated on an effort to breath deeply, and with regularity, every inspiration and expiration being in unison with a mental rythm, sleep will come almost unbidden.

The mind must be controlled by the will power strictly to this effort if success is desired. Short excursions into other fields, the planning of the next day's work, the reviewing of the events of the past, the building of air castles, the fears of impending disasters or evils, etc., must all be relegated to other domains; the most important of all things just now is to see that every inspiration is a fairly deep one, the expiration is slow and complete, and the time from the beginning of one inspiration to the beginning of the next is equal in every act of respiration. No jerks or sudden variations in the respiration should be allowed, but there must be cadence in the rise of the chest walls with the inspiration, a gradual swell with a corresponding decrease in the act of expiration.

To the sufferer from insomnia this may not be easy for the first trial, but unless there is material injury to the brain, as by over-stimulation, persistent effort will enable him to succeed by this method after hypnotics have failed.

While medicines are of but little use, they must often be given for their moral effect upon the patient, and occasianlly, too, their administration is called for to meet some special inspiration, but there is no routine treatment applicable to these cases. Judgment in deciding how much work and how much recreation is needed in each case, discretion in placing the situation before the patient, and tact in securing the patient's confidence and willingness to adopt suggestions made, are the essential features in the treatment of the overworked.

Editorial Notes and Comments.

With this issue of the JOURNAL we begin a series of editorials to run through several issues of advice to young doctors. It is intended that these papers shall deal especially with matters extraneous to the preparation and college course leading to graduation and the possession of a diploma, as one competent to practice medicine, but nevertheless important in his conduct towards and relation to the public in building a practice. The need of something more than the mere knowledge of medicine was felt personally thirty years ago, and it is to supply this need in a limited way that the work is undertaken. What is here written is drawn largely from personal experience, and in order to avoid a change of pagarism, we wish to state here that several years ago we owned and read a book treating of these matters, by Dr. Cathell. This book has been loaned or lost. Its reading fifteen years ago made a lasting impression, and its arguments may influence to some extent these writings, though there is no intention of so using them without giving due credit.

To our friends, the young doctors, we would say read these papers and appropriate what is useful to each of you individually.

The first authentic history of the founding of a hospital for the poor, was by the Buddhist priests in India about 220 years before Christ.

Hospitals in a way measure the civilization of the people * * *. To Christianity solely do we owe the in-

stitution of hospitals for the reception and care of the sick and injured * * *. Services ordered the chariots to follow the army on the march for the conveyance of the sick and wounded. These are the first ambulances on record * * *. The Hotel Dieu in Paris is said to date from the end of the seventh century. The earliest record of hospitals in England was about the end of the eleventh century. * * *

The epoch of founding and building [illegible]als was the eighteenth century and [illegible] of building and founding schools and libraries was the ninth century. —*Harrington in Buffalo Medical Journal* April, 1904..

A large attendance on the sessions of the next meeting of State Medical Society than ever before in its history is expected in Raleigh on May 25th to 26th. Governor Aycock will deliver an address of welcome and Dr. Baskerville, of the University, will deliver a lecture on Radium. The local committe has made arrangements for handling the large number expected on account of this being the first meeting under the new organization.

The Pure Food Law.

In the discussion of this question in the United States Senate early in April, Senator Heyburn, of Idaho, "declared that the great opposition to the pure food bill came from the druggists who were evidently attempting to keep illegitimate and adulterated drugs from the prohibitions of the bill. On othe other hand, the physicians of the country were unanimously in favor of pure drugs.

"In many instances," remarked Mr. Heyburn, "the physicians found that through the adulteration and bad mixing of drugs, their prescriptions had exactly the opposite effect to that intended. Out of fourteen samples of drugs advertised thirteen were found to be rank frauds. More than 50 per cent. of the patent medicines were, Mr. Heyburn said, deleterious to health while a large per cent were absolutely poisonous. .

"Another strong element of opposition, said Mr. Heyburn, was the newspapers advertising bogus medicines. They had endeavored to have the bill amended by striking out the vital portion concerning deleterious drugs."

The press dispatches report that Senator Heyburn is endeavoring to have the Senate pass a bill in regard to pure foods, but the Senate leaders are opposing it, and say it shall not pass. Physicians especially should be concerned in regard to this bill, not only as public citizens desiring unadulterated foods, but as conservators of the public health the profession realizes fully the evils of unwholesome foods, and in the matter of adulterated medicines, the crime of substitution only is paramount to it.

The increase in the death rate from consumption in the city of Raleigh during the last few years has prompted the Chamber of Commerce through a special committee, to ask the Board of Aldermen to pass certain ordinances looking towards preventing the further spread of the disease. The proposed ordinances require the publishing of a pamphlet of instructions under the direction of the Board of Health, for the use of those interested, giving the nature of the disease and measures to be used to prevent its spread, requiring the reporting by physicians of all cases of consumption, and a record by the Board of Health, the use of disinfectants and supplying same to the indigent, periodic visits and instruction in the use of disinfectants by the sanitary officers,

the disinfection of premises vacated by consumptives, and a record of premises where consumptives have resided. We most cordially commend this action of the Raleigh Chamber of Commerce and trust the city fathers will pass the ordinances as asked. Consumption is a contagious disease and as such measures should be taken every where to prevent its spread. Every effort should be made by State, county and local boards of health, and by the medical profession generally to instruct the public upon the fact that much can be done to check the spread of tubercular affections. It will require stringent legislative statutes and town ordinances to accomplish anything in this but a health moral sentiment behind the legal statutes is essential to the proper enforcement of such laws. In this creating of this moral sentiment the medical profession is a prominent factor.

State Board of Charities and The Insane.

At the annual meeting of the State Board of Charities early in April the importance of additional accommodation for the insane of the State was discussed. The secretary's report shows that there were at that time 281 insane persons in the different county homes and jails, that should be in one of the State hospitals. Fifteen counties failed to report and the board estimates that there are 500 insane persons now in need of hospital treatment. Another need emphasized was some provision for youthful criminals, and feebleminded children.

During the same week the directors of the Central Hospital met and appointed a committee to act with a like committee from the Western (Morganton) Hospital to arrange for the transfer of patients from the Central to the Morganton institution, the former being badly overcrowded while the latter is not.

In view of the urgent needs of the situation and that those confined in the jails and county homes of the different counties, cost for maintenance last year the sum of $187,000, not including the salaries of overseers or the products of the farmers at the homes, it seems to us short-sighted policy on the part of our law makers to longer defer taking steps properly caring for this class. They are wards of the State and the State is under moral obligations to care for them. It is evident that our insane cannot be given any thing more than custodial care in jails and almshouses. It is a blot upon our civilization that these people should be confined with criminals. North Carolina is a great State, amply able to care for her dependents, and she should do it. These strictures apply with equal force to the care of the youthful criminal.

The reports from the Goldsboro institution (for colored insane) show a crowded condition. A marked improvement here is the seperation of the tubercul s patients from the others in a special ward or department.

Two correspondents of *The Medical World*, April, 1904, write of kindred subjects that are of more than passing interest. The religious press is arraigned for allowing its advertising columns to be used by fakirs and quacks, gulling the public with an implied if not an actual endorsement by the editors of their rostrums. The managers of such papers hold that they could not run the periodicals without these advertisements and refuse to see anything dishonest or objectionable in making their columns a medium through which the public can be and is gulled.

The other correspondent asks why ministers and their families should receive medical attention free? Ministers as a rule receive good salaries, the doctors generally pay their proportional part of the ministers' support, and the correspondent does not see why the doctor should give his services any more than other classes.

The last of these can be easily regulated by the preacher and his doctor and as the editor of the *World* comments on it, it is a matter of local custom any way. We think most physicians do gratuitious work for their individual pastors; many charge half rates to all others; while some make no charge against a minister of any denomination. Preachers generally will pay reasonable bills for medical services if presented.

The other question is a more serious one, and is the medical man's business only so far as his interest in the public welfare is concerned. The physicians see and realize perhaps as no other class the evils of this custom, but the remedy is hard to find. *The World's* comments advises a system of boycotting and advising our patients to boycott papers that admit objectionable advertisements. This to our mind is questionable—because so many of our patients patronize these fakirs and quacks, and because too, it is doubtful if enough of the profession will adopt the plan to make the boycott effective.

The North Carolina Medical Society.

In a few days after this number reaches our subscribers the 1904 meeting of the Medical Society of the State of North Carolina will meet in Raleigh, and the prospects are bright for the largest gathering in the history of the society. The Yarborough Hotel is prepared to accommodate 600, herein there will be room for all, and we hope our busy doctors will take a few days' rest and rub elbows with their professional brethren in the society. From the preliminary program which we give in this issue it can be readily seen that there is to be a feast of good things professionally.

PRELIMINARY PROGRAM MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA.

FIFTY-FIRST ANNUAL MEETING.

Raleigh, N. C., May 24, 25 and 26, 1904.

General sessions will be held in Capitol Building, Senate Chamber.

The House of Delegates will also sit in Capitol Building.

Address of Welcome, His Excellency, Gov. Chas. B. Aycock.

Address of Welcome by the City, Hon. Ed. Chambers Smith.

Response, Dr. James M. Parrett, Kinston.

President's Annual Address, Dr. H. P. Weaver, Asheville.

Report of Secretary, Dr. J. Howell May, Waynesville.

Annual Oration, "Aesculapian Dreams," Dr. C. A. Julian, Thomasville.

Annual Essay, "An Ounce of Prevention," Dr. J. G. Blount, Washington.

Annual Debate, "Diphtheria," Leader, Dr. J. A. Williams, Reidsville.

"Infection," Dr. I. W. Faison, Charlotte.

"Immunity," Dr. Albert Anderson, Wilson.

"Uric Acid and Metabolism," Dr. Ben. K. Hays, Oxford.

"Pneumonia," Dr. Jno. C. Montgomery, Charlotte.

"The Relation of the General Practi-

tioner to the Prevention and Cure of Tuberculosis," Dr. Paul Paquin, Asheville.

"Malaria as Complicating Typhoid Fever," Dr. A. S. Pendleton, Henderson.

"The Bedside Diagnosis of Typhoid Fever," Dr. Chas. Z. Candler, Dillsboro.

"Modern School Methods as a Factor in the Production of Nervous and Mental Disease," Dr. I. M. Taylor, Morganton.

"Acute Entero-Colitis," Dr. Guy S. Kirby, Marion.

"Asthma, Its Etiology and Treatment," Dr. James Sawyer, Asheville.

"Medical Dietetics in General Practice," Geo. P. Edwards, Sylva.

"A Plea for More just Judgment of Drug Users," Dr. Geo. S. Petty, Memphis, Tenn.

"A Modern Method of Treating Morphine, Whiske and Other Drug Addictions," Dr. S. M. Crowell, Charlotte.

"Uncinariasis in North Carolina; Its Distribution, Frequency, Etiology and Pathology," Dr. W. S. Rankin, Wake Forest.

"Ucinariasis in the Mountains of North Carolina." Dr. W. P. Ivey, Lenoir.

"Uncinariasis in Eastern North Carolina," Dr. J. L. Nicholson, Richlands.

"The Care of the Tuberculous and the Importance of Intelligent Legislation and Education as Factors in the Prevention and Cure of Tuberculosis," Dr. Thos. P. Cheeseborough, Asheville.

"The Business Side of the Profession," Dr. E. T. Dickenson, Wilson.

"Quinine," Dr. J. M. Parrott, Kinston.

"Some Uses and Abuses of Glasses," Dr. R. V. Brawley, Salisbury.

"Specific Keratitis and Trachoma," Dr. J. H. Honnett, Wilmington.

"The Pupil Geflex as an Aid to Diagnosis," Dr. H. H. Briggs, Asheville.

"Adenoids in Children a Plea for Early Recognition and Treatment," Dr. R. J. Teague, Roxboro.

"The Treatment of Joints Injured by Chronic Rheumatism," Michael Hoke, M. D., Atlanta, Ga.

"Legislation and the Doctor," Seavy Highsmith, M. D., Hope Mills.

"Gas and Ether Anæthesia," Dr. Southgate Leigh, Norfolk, Va.

"The Morphological and Psycho-Physical Intrinsicalities of the Negro Race," Dr. N. B. Herring, Wilson.

"The Use of the Cystoscope," Dr. A. J. Crowell, Charlotte.

"Gun-shot Wound of the Abdomen with Report of Cases," Dr. J. W. Long, Greensboro.

"Some Recent Work on the Kidney," Dr. St. Clair Spruill, Baltimore, Md.

"Treatment of Some Common Fractures in Private Practice," Dr. F .H. Russell, Wilmington.

"Surgical Treatment of Retro-Displacements of the Prolapsed Uterus," Dr. C. M. Strong, Charlotte.

"Menstrual Disorders," Dr. J. J. J. Young, Clayton.

"The Treatment of Ununited Fractures," Dr. Stuart McGuire, Richmond, Va.

"Lacerated Cervix, Results and Treatment," Dr. P. J. Macon, Warrenton.

"Immediate Repair of Lacerated Perinacum," Dr. P. A. Nicholson, Washington.

"When to Amputate," Dr. H. A. Royster, Raleigh.

"A Plea for Early Exploration Incision for Diagnostic and Curative Ends in Masked Conditions of the Upper Portions of the Abdomen," Dr. Hugh M. Taylor, Richmond, Va.

"A Protest against Indiscriminate Surgical Operations upon the Female

Organs of Generation," Dr. A. K. Tayloe, Tarboro.

"Railway Spine (Traumatic Neurasthenia) What is it? and How Recognized," Dr. J. E. Rogers, Raleigh.

"Abdominal Surgery with Special Reference to the Preparation and After-Treatment," Dr. W. P. Whittington, Asheville.

"Papillomata and Their Degenerations," Dr. Wm. deB. MacNider, Raleigh.

"Address on Thorium and Its Uses," Prof. J. M. Baskerville, Chapel Hill.

Paper by Dr. C. L. Minor, Asheville.

Nephouti by Dr. R. E. Mason, Charlotte.

Paper by Dr. W. K. Lane, Goldsboro.

Exhibition of specimens under section on Gyæcology by Dr. H. A. Royster, Raleigh.

Cholelithiasis with special reference to surgical treatment, Alfred C. Wood, M. D., Philadelphia.

Reception at the Capitol Club on the evening of May 25th.

Full fare will be paid for railroad tickets going and be sure, every doctor, to take a receipt for his fare paid going to Raleigh and at Raleigh present his receipt to Secretary, Dr. Way, who will arrange by signing it to secure return for one-third. This important receipt should be taken by all.

Mr. Cobb assures the JOURNAL there will be ample room and the local committee have arranged for 600.

OFFICERS AND COMMITTEES.

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Selections From Our Exchanges.

Medical Treatment of Diabetes.—W. H. Thompson (*Medical Record*, Feb. 6, 1904) says that he rarely prescribes codeine or any other derivative of opium in diabetes, believing such practice to be harmful. He has learned from experience the great value of cod-liver oil in diabetes, and that diebetics can take it in large quantities with advantage. Its use is however contraindicated in obese persons, or those leading a sedentary life. Next in importance to cod-liver oil he places iron, and next to that arsenic. In severe cases of diabetes he prescribes fifteen grains each of antipyrin and sodium benzoate, four times a day, and after a time substitutes for these fifteen grains of aspiring and ten bismuth salicylate. Mineral waters are often beneficial in diabetes, but they should not be given to persons who are emaciating.

Finger Wounds.—When the finger wounds are extensive and parallel with the long axis of the finger, especially if the edges are much contused, it is

better, I think, not to suture them at once. Swelling is almost always excessive, partly by reason of the generally imperfect asepsis maintained, partly from reaction. Either the stitches will cut out, tension aggravating the inflammation, or the tissues may be drawn so tightly as to choke the end of the finger.—J. W. Marsee, *Gallards Medical Journal.*

The great Majority of cases of erysipelas depend for their basal cause upon a fermentative, infective process in the alimentary canal, which sets up a general infective condition all through the body with local manifestation. Hence the suggestion of the sulphocarbolates for the intestine itself and the calcium sulphide to work through the circulating fluids of the body.—*Alk. Clinic.*

Diet for Infants in Gastro-Intestinal Catarrh.—In some cases a cream mixture agrees better than diluted milk, or whey thickened with a small quantity of malted food or predigested gruel is retained when other forms of food are rejected. Gradually and with caution the amount of milk is increased, until at last the child is able to take the full allowance suitable to its age. Even when the stage of convalescence is well advanced it is advisable to restrict the infant to a milk diet, with or without Mellin's Food, and to avoid the use of unmalted foods for some time.—From Fenwick's "Disorders of Digestion in Infancy and Childhood."

Philanthropy Under Difficulties.—When things have reached such a stage that the trustees of a self-respecting university discuss with great earnestness and warmth the propriety of accepting donations from the revered Rockefeller, it certainly tends to discourage this well-known person from bolstering up the cause of education.

It seems to be very hard for a practical, businesslike philanthropist to apply the general principles of propriety to his donations. There are a large number of widows and orphans now living in anything but opulent circumstances whose husbands and fathers claimed to have been deprived of a livelihood by the same eminent financier. There could hardly be a more appropriate method devised for distributing some of the surplus profits of an oil business, personally controlled by a noble philanthropist, than by providing a fund to assist in the maintenance of those whom it was necessary to convince by stern methods that the said business belonged to him.

Death From Electric Shock.—Jellinek's recent experimental researches show that various kinds of animals have different reactions against the influence of electric currents. Horses are killed by the electric current in street cables—i. e., a constant current of 460 volts—while unipolar application of constant current of 110 volts has a bad effect after a time. Small animals, such as rabbits, dogs and guinea-pigs, are more resistant, while frogs and tortoises are not killed by currents of 10,000 volts. Death occurs through paralysis of the heart and respiration, and animals which recover show similar symptoms to those which occur in man after lightning stroke, such as paralysis, coming on after an interval sometimes, hemorrhages, and ocular lesions. The injury to human subjects through electricity depends not only upon the tension and amount of the current, but, and in particular, upon the re-elongation of the heart,

which expresses the hypertrophy of the left ventricle. No other pathological condition presents this symptom in equal degree. In the "nervous heart" of the young there is, indeed, a somewhat increased displacement, but it is far less in degree. On the other hand, advanced cases of tuberculosis or marasmus also present the phenomenon, owing probably to the decreased resistance of the lungs, but here, also, there is no possibility of confusing the conditions.—*"Lancet-Clinic."*

The Nature of Electricity.—Concerncerning the fundamental nature of electricity, there is still no certainty, says an editorial writer in *The Electrical World and Engineer,* though there are various hypotheses, including several that explain both electricity and magnetism in terms of the ether. The writer goes on to say:

"None of these theories seem capable of being submitted to experimental demonstration. It is certain, however, that, since the interconnection between electricity and magnetism is known, a demonstration of the nature of the one must, by corollary, include a disclosure of the nature of the other. Moreover, it would not seem likely that the complete unraveling of the nature of electricity would necessarily include a revelation of the nature both of matter and of gravitation. All that can be said with reasonable certainty at present seems to be that electricity and magnetism are states of disturbance in the universal ether, although the exact kind of disturbance can not be defined, partly because the mechanism of the ether itself must be sufficiently known in order to differentiate its disturbed conditions from its normal conditions. In the case of air, as an atmosphere on the surface of our globe, we have a sufficiently clear idea of its nature to enable us to say that a streaming disturbance of the air, necessarily accompanied by spinning or vorticity, constitutes the phenomenon that we all recognize as wind. Wind may, therefore, be defined as a particular disturbance of the air. Sound, as it reaches our ears, we attribute to a different kind of disturbance in air. So it seems clear, in like manner, that magnetism and electricity are particular disturbances in the ether. Just what the disturbances are is not clear. But we know that the two disturbances are mutually related in the manner that streaming is related to spin or vorticity in an incompressible fluid."—*Literary Digest.*

"The creation of a new species of sea life by the use of salt solutions and crossing two varieties has been accomplished by Dr. Jacques Loeb, the physiologist," says a news dispatch to the *New York Herald* (February 26): "The news of this new application of salt solutions has come in an article published by Dr. Loeb in *Pfluger's Archiv.* * * *. The crossing of the sea-urchin and the starfish is Dr. Loeb's recent achievement. Starfish and sea-urchins live in the ocean under the same conditions, but scientists have found that in the natural sea water the two do not cross as do many species of animals. Dr. Loeb used an alkaline solution containing the salts of sea water and sodium hydrate. The result was a new child of the sea, neither sea-urchin nor starfish, but combining the qualities of both. Dr. Loeb has repeated the experiment more than once."—*Literary Digest.*

Women Inspectors.—We learn from an English contemporary that a woman inspector has been appointed in Liver-

pool who is charged with instructing young mothers in their duties toward their children. What she has to do is put down as follows: To visit houses where births have occurred, and to instruct the mothers in the preparation of infants' food and the proper method of infant feeding; to keep under constant supervision houses occupied by dirty tenants; to endeavor to raise the standard of cleanliness; to visit certain houses where there are cases of non-notifiable disease, such as whooping-cough, and to advise as to the nursing and care of the patient; to visit houses where there are dirty and neglected children; to visit houses where infantile deaths have occurred; to assist as far as possible in house-to-house inspection. The idea is an excellent one, and much misery might be avoided if this plan were carried out among the poor of our large cities.—*Medical Age.*

Incomes of American Physicians.—The popular idea that medical men are as a general rule in easy circumstances is refuted by a writer in *Leslie's Monthly*, who says there are about 200,000 doctors in the United States, or about one for every 350 people. It has been approximately estimated that the average yearly income of these men is $750, or that the public in the county pays $150,000,000 annually for medical attendance, omitting entirely the money spent for patent medicines, which brings millions of dollars to manufacturers, or the amounts spent for doctors' prescriptions, or paid to quacks and commercial doctors. The preparation for the practice of medicine that gives a man a good standing in the profession means an expense of, liberally speaking, $4,000 for four years in a reputable medical school, $1,000 for general expenses during two years' hospital service, and perhaps another $1,000 for setting up in practice. A year or two in Europe is also a help.

By this article the public will learn that medicine is not a path of roses, and many aspirants for the degree of M. D. will probably think twice before embarking on a life's work that is so poorly paid.—*Medical Age.*

Iodism, Prevention of.—This is the effect of the iodized alkalies suddenly flooding the organism and pouring out through the mucous membranes. F. Lesser (Deutsche medicinische Wochenschrift, vol. xxix, No. 46) believes that this afflux of alkali is what causes the catarrhal condition in the mucous membranes and leads to iodine intoxication. He suggests as a prophylactic measure that the iodine salts be administered in a mucilaginous vehicle in order to render absorption slower and more gradual. In some cases it may be advisable to give the iodine per rectum, where absorption is also slower. Another prophylactic measure is to use the iodine in the form of iodized fats or the injection of iodipin. In cases of pronounced idiosyncrasy the latter may be used at first in small injections in order to accustom the organism slowly, and then the internal administration may be gradually substituted.—*Medical News*, January 30, 1904.

Inflammation of the Middle Ear in Disease of Children.—Theo. J. Elterich (*Pennsylvania Medical Journal*, February, 1904) says earache in children is generally caused by acute inflammation of the middle ear, suppurative or catarrhal. Infants and young children may have suppuration of the middle ear without giving satisfactory evidence of pain or without rupture of the drum membrane.

Purulent otitis media is nearly always present in acute infectious diseases of the gastrointestinal and respiratory tracts in young children, and probably stands in a causative relation to gastro-enteritis and bronchopneumonia.

The cause of death in many acute and chronic infectious diseases, in meningitis, and in the exanthemata, is the result of unrecognized and untreated abscess of the middle ear.—*Medical Age.*

The Recognition and Prevention of Iodism.—W. Lesser (*Deut. Med. Woch.*, Nov. 12, 1903) suggests the following methods for the prevention of iodism: (1) By giving iodides in slimy substances, such as mucilages, which prevent the rapid absorption of the iodide; (2) by dividing the daily doses into a number of small single doses; (3) by giving enemata of sodium per rectum, possibly together with opium, in order to slow the absorption; (4) by substituting for iodides albuminous iodine compounds; and (5) by injecting iodipin subcutaneously. This latter method has the disadvantage that too little iodine is absorbed at one time to act sufficiently, but in cases of idiosyncrasy against iodides it may be used with advantage.—*Medical Age.*

Iodid of Potassium in Pneumonia.—Altshul in *Medical Record* claims that he has not had a death in twelve years out of 62 cases of pneumonia treated with iodid of potassium, and thinks that the action of the drug is directly antagonistic to the disease. The method of treatment is to give an initial dose of at least 10 to 15 grains, increasing it by 5 to 10 grains every two or three hours day and night, according to the severity of the case, until defervescence is well established. However soft the pulse may become the dose is kept up, the guide being the regularity of the heart, as determined not by the pulse alone, but by auscultation of the heart itself and the character of the heart sounds, especially the second pumonic. If this be clear and distinct, we are accomplishing what is desired. If there is irregularity in the heart itself, strychnin in the dose of 1-60 to 1-40 gr. every four or six hours is given until the heart becomes regular. In this manner he has in a large number of cases given 1,000 to 1,500 grains of the iodid in a 50 per cent. solution, in milk, per day, and in one case as high as 1,800 grains. Dr. H. T. Prentiss, of Holyoke, Mass., reported to him a case in which he gave 3,000 grains daily for about four days, and to another patient, a child, he gave 2,100 grains daily for two days with no signs of intolerance, and recovery in both cases. At the commencement there may be a slight coryza, but this disappears as the dose is increased. He insists on the importance of the condition of the heart during this treatment, and believes that failures are due to faulty methods and lack of courage.—*Journal American Medical Association.*

Chorea—What Is It?—Charles J. Aldrich divides chorea into two classes: (1) Chorea of Sydenham, (2) Secondary or symptomatic chorea, including (*a*) chronic progressive, or Huntington's chorea; (*b*) prehemiplegic disorders of the movement; (*c*) posthemiplegic disorders of movement; (*d*) congenital chorea, more properly congenital athetosis; (*e*) chronic chorea. A satisfactory presentation of the pathogenesis of chorea in the present state of our knowledge is impossible. It is evident that we have to deal with an abnormally susceptible nervous system and the action of some toxin or toxins which are the result of bacterial in-

fection. The belief is growing that the disease is due to irritation of the motor mechanism, most probably the cells of the cerebral cortex, by some irritant of infectious origin. That individual predisposition usually exists is certain, and that the rheumatic diathesis, particularly when associated with degenerative types and precocious development of the mental and psychical functions must be considered important causative agents, is positive. Indeed, it must be regarded as a disease of neurotic stock, a stock too finely organized to undertake safely the competition, the overwork, anxiety, and successes, as well as the failures of school life; unable to withstand successfully the changes of adolescence as well as early pregnancies—in fact, anything which produces a lowering of the normal physiologic resistance.—*Archives of Pediatrics.*

Depressant Drugs and Sudden Deaths.—It is very interesting to examine the statistics of sudden death from heart disease in New York City during the last three years. In 1900 there were registered 4,069 deaths from heart disease in the greater city of New York in a population of approximately 3,455,000, while in 1901 there were 4,626 such deaths, the population having presumably increased about 100,000. Thus there was an increased ratio of sudden deaths to population. In 1902 the number of sudden deaths reported from heart disease had increased still further to 5,461. Calculating the percentages of sudden death from heart disease to population, allowing for the before mentioned increase in population, the deaths of this kind to each thousand were, in 1900, 1.18; in 1901, 1.31; in 1902, 1.34.

For the year 1903 there was a decrease in the number of deaths from this cause, so that the ratio was only 1.28 per thousand.

There has been some discussion among sanitarians and public-health officials as to the reason for this decrease. A portion of the decrease has been ascribed definitely—and with considerable plausibility—to a certain cause. At the beginning of last year the Board of Health, suspecting that many prescriptions for phenacetin were being filled by druggists with acetanilid, or with a mixture of phenacetin and acetanilid, sent inspectors to obtain definite information on this matter .Altogether 373 samples of phenacetin were bought from the same number of drug stores in various parts of the city, phenacetin being specially asked for and in some instances even obtained, on a physician's prescription. Of the 373 samples, 58 were pure phenacetin; 315 were adulterated with cheaper drugs, mainly acetanilid, and in 267 cases containing more acetanilid than phenacetin; 32 samples were pure acetanilid. The commissioner made these facts public, and threatened to expose and prosecute all druggists who would hereafter be found committing this misdemeanor.

It is very interesting at least to find that in a single year after the investigation and supposed consequent reform on the part of the dispensing pharmacists, there should be a slight reduction in the actual sudden-death rate from heart disease, and that at a time when for many years there has been a constant increase in the death-rate form this cause. It is well known that acetanilid is a distinctly depressant drug for the heart. Professor Jacobi, of New York, always insists that it is an actual tissue-poison, to be used only with great care, and many therapeutists teach that it is the underlying cause for the increase

in reported sudden deaths that has occurred in recent years.

This question of the evil of depressant drugs is all the more interesting because of the freedom with which so-called headache powders, mainly composed of acetanilid and other heart-depressants, are now so commonly bought and sold. Many women, and even men, think nothing of stepping into a drug store and asking for something for a headache. The headache powders that are dispensed to them so freely always contain acetanilid, and great harm is being done in this way. It is probable that a similar investigation in other cities of the country might also furnish instructive facts. Certain it is that proper legal regulation of the sale of such depressant drugs, so that they could not be dispensed except under the direction of a competent physician, would in the long run have a beneficial effect on the sudden-death rate from heart disease. This cause of sudden death is becoming more frequent in this country, and is a serious menace for those suffering from even slight forms of heart disease if they are so foolish as to take these remedies.—*Editorial Journal of the American Medical Association,* January 16, 1904.

Incomplete Removal of Placental Tissue the Most Potent Cause of Puerperal Sepsis.—In writing on this important subject in the *International Medical Magazine for November,* 1903, Krusen expresses the following views:

He believes, in all cases in which there is the slightest suspicion that there are fragments of placental tissue within the uterus, that organ should be thoroughly explored and carefully emptied under the strictest antiseptic precautions. By far the greatest number of cases of puerperal sepsis observed by the writer have been due to incomplete removal of the placental tissue.

The treatment should be local and general. The whole genital tract should be thoroughly disinfected, and the uterus emptied. If the discharge continues to be foul, frequent intra-uterine douches should be employed. It is often advisable to provide drainage by inserting loosely a strip of iodoform gauze; 10 to 20-grain iodoform suppositories may be inserted in the vagina. If abscesses form around the uterus, they should be evacuated through the vagina if possible. The method employed by Pryor, of packing the uterus with 10 per cent. iodoform gauze and packing the pelvis through a broad incision in the posterior cull-de-sac, gives good results.

The general treatment should be stimulating and supporting. Easily digested food should be freely administered. Strychnine, digitalis, nitroglycerin and adrenalin chloride may be used either by mouth or hypodermically if they are indicated. Ice-bags may be employed over the abdomen, and tend to limit the spread of the inflammation. High enemas relieve tympanites and irrigate the bowel. The use of normal saline solution, either by rectal injection, hypodermoclysis, or intravenous injections, is a valuable adjunct to the other methods. Very often the stimulating and supporting method of treatment will save cases apparently hopeless, and will give better results than surgical intervention under such unfavorable circumstances.

The use of the curette after the uterus has been thoroughly emptied is harmful, as it breaks down the leucocytic wall, which serves to prevent the invasion of the deeper layers of the uterus by the offending bacteria. In the most aggravated cases of puerperal sepsis, those

of streptococcic infection, the uterus is empty, and the vaginal discharge very slight.

Hysterectomy is usually mutilating if not fatal in the treatment of sepsis. If hysterectomy is to be of service it must be performed early, before the microbes have invaded the general system, and this means the unnecessary sacrifice of the uterus. If late, the mortality is great and operation practically useless. If one is confident that there is an abscess of the uterine wall, and that the disease has not extended materially beyond the uterus, then hysterectomy is indicated; but vaginal section and intrauterine and intrapelvic packing with 10 per cent. iodoform gauze will save a larger percentage of such cases than hysterectomy.

In making a vaginal examination during labor, the hand should be as thoroughly asepticized as if the obstetrician intended performing an abdominal operation, and the examinations should be as infrequent as possible. If the physician has been recently operating upon a septic case, extra precautions should be taken and aseptic rubber gloves be worn.

If the uterus is thoroughly contracted and no unusual examination or manipulation ,such as a forceps delivery of placenta, etc., has been employed, douches are not necessary.

Krusen has never used formalin intravenously.

Perfect rest of the limb in an elevate position is absolutely necessary in the treatment of phlegmasia alba dolens. After it has been wrapped in gauze and cotton saturated with lead water and laudanum and the acute symptoms have subsided, he covers the part with an ointment of equal parts of ichthyol, belladonna ointment and laudanum. The leg should never be rubbed because of the danger of detaching fragments of the thrombus. The general health and strength should be supported by carefully regulated diet and stimulants, if asthenia is marked. The patient should be kept in bed several days after symptoms have subsided for fear of an embolism, which is always possible until clot has been absorbed or organized.—*Therapeutic Gazette.*

An Experimental Contribution to the Pathogenesis of Gastric Ulcer.—R. dalia Vedova (quoted in *Medical Fortnightly*) has experimented extensively on dogs, and has found that in producing lesions of the celiac plexus or its splenchnic branches, necrotic, hemorrhagic, ulcerative changes took place in the stomach walls, with little or no inflammatory reaction, and presenting the characteristic necrobiotic features of an ulcer of the stomach.

Rommeli: or Buttermilk.—In acute as well as in chronic gastrointestinal diseases buttermilk is a surprisingly certain therapeutic dietetricum. Its value lies in the small amount of fat it contains, in the fine distribution of the casein, brought about mechanically by the churning process, and in the presence of lactic acid, which prevents abnormal fermentation, protects the casein from decomposition and also has a peptonizing action.

Buttermilk is not possible as an exclusive and permanent diet, because of its effects in mineral metabolism, especially on the calcium-balance. For prolonged use it is necessary to increase the fats and diminish the addition of sugar.

NEWER MATERIA MEDICA.

Soluable Mercurials in the Treatment of Syphilis.

By Geo. W. Tobias, M. D., New York.

It has been found in practice, that the formula for the so-called "specific" bin-iodized oil, adopted by Prof. Panas, Dieulafoy, Lancereaux, Brissaud, Fournier, and other leading French specialists for diseases of the skin, was far too weak for the mercurial treatment of syphilis. Nevertheless, there has been a growing demand for this oil, because it is not irritating to the stomach, and used hypodermically, is preferable to the insoluble mercurials (calomel, tannate of mercury, etc).

The assimilation and subsequent elimination of these injections of insoluble salts of mercury is always uncertain and unsatisfactory, and they frequently produce abscesses, and always cause considerable shock to the patient.

Since Ricord's time, the proto-iodide has been the favorite internal treatment. It is preferable to bi-chloride of mercury, because the latter attacks the living tissues, chemically uniting with it to form an albuminate of mercury, before being slowly reduced to an oxide, and finally into small globules of metallic mercury.

This reduction to metallic mercury occurs with all salts of mercury when introduced into the system in whatever form, but the *proto* salts are reduced to larger globules than the *per* or mercuric salts. The writer is of the opinion that it is not important which salt of mercury is exhibited as far as the effects on the disease isc oncerned, preference however should be given to a preparation which does not attack violently the living tissues. Hence this soluble non-irritating oily solution of mercuric iodide is possessed of advantages which cannot be denied, for in the intestinal emulsification of the oil, the infinitesimal sub-divided mercuric iodide comes in contact with the food contents of the alimentary canal, and any caustic action is exercised on these rather than on mucous membranes.

In pill form, proto-iodide and calomel, as well as the red iodide of mercury, often cause considerable irritation in the alimentary canal, and even while these disadvantages may be overcome to a certain extent by the addition of small doses of opium, it is well known that opium locks up secretions, which condition is certainly undesirable in the case of syphilitics.

Dr. Chapelle, of the Paris Municipal Laboratory, finds that while the bin-iodide of mercury is only soluble in very minute quantities in oils, such as almond, olive, etc., that if the mercuric iodide is formed in the oil itself, it dissolves in its nascent condition and remains in its nascent condition and relution of nascent mercuric iodide is a convenient and permanent strength. While of course this mercuric iodide in oil acts like all other mercurials as an anti-syphilitic, it never salivates or produces the slightest irritation in the alimentary canal.

This oil may be given in the form of capsules of four minims each, (which is equivalent to one thirty-second of a grain) or injected hypodermically. Clinical experience shows that its effects are the same as mercury by inunctions, or of any of the mercurial salts when administered by the stomach or hypodermically, and its use can be continued indefinitely, without requiring intervals of repose. Blood tests thoroughly prove that patients do not become anemic when this bin-iodized oil is long continued, even in heroic

doses, and while the capsules graually bring the patient under the influence of mercury, the hypodermic injections are very prompt in their effects on gummas and other tertiary symptoms.

The one per cent. solution of mercuric iodide in oil, is now usually prescribed under the name of cypridol, which does not betray the fact to the laity, that mercury is being administered.

All the disadvantages which are unavoidable with the soluble and insoluble mercurial preparations are avoided with cypridol dispensed in capsules. These do not affect the digestive organs or salivate even in massive doses. The injections of cypridol are quite painless. Eight minims is considered a normal injection, and this dose can be repeated every day if desired.

Technique.—The needle should be introduced deeply into the gluteal muscles, and a short interval allowed to elapse before the cypridol is injected, in order to see if any blood exudes. If there is blood, no injection should be made at this point, as there is danger of pulmonary embolism.

In my somewhat extensive clinical experience with cypridol, I find but one objection. It is, that the symptoms often subside too quickly, and with syphilitic patients it is difficult to persuade them to continue the treatment unless accidents re-occur.

Faulty Elimination is a prolific source of trouble and the cause of many distressing symptoms pointing to no definite lesion, but complicating and obscuring the actual symptoms of a real disease. Such a condition is puzzling to the doctor and discouraging to the patient, often causing dissatisfaction confidence in the physician, yet the whole train of symptoms may be only only the result of a lowering in the tone of the secretory organs and the retention of poisonous material in the system. In all conditions which follow as a result of the blocking of the eliminative organs, such as colds, bronchial catarrh,, la grippe, pneumonia and autotoxia, one of the first indications is to bring the eliminating organs up to the normal and put them in condition to perform their natural duty. A large proportion of the cases which doctors are called upon to treat during the winter and in the spring are furnished by neglected colds and after-effects of la grippe. These uncured affections keep the system open to new attacks, the patient develops a bronchitis, or pneumonia, the kidneys are affected and sometimes left permanently weakened. A cold is by no means a simple affair which, left to itself, will always speedily get well. The accute stage will probably spend itself, and the patient may think he is free from further trouble, but such attacks render him more liable to further infection, and pneumonia, chronic bronchitis, and chronic kidney disease are some of the sequelæ of frequent colds. Therefore, these apparently harmless colds are to be taken seriously and cured absolutely as soon as possible. To cut short these attacks and restore the tissues to normal powers of resistance the Dad Chemical Co., of New York commend Respiton. It contains asclepias tuberosa and berberis. A teaspoonful in a glass of hot water every two hours will effect a complete cure in a few days.—*Interstate Medical Journal,* April, 1904.

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Do this and your success in the treatment of every class of cases will be a matter of course. Give calomel, gr. 1-6, podophylin, gr. 1-6, one granule of each for 4 hourly doses in the evening, followed by Saline Laxative in the morning. This "cleans out." Intestinal Antiseptics will "clean up."

Calcalith (calcium and lithium carbonates with colchicine) is a solvent of choice in these conditions. It will eliminate waste products rapidly. Tone up with Triple Arsenates and Nuclein, or that prince of spring tonics, Sanguiferrin.

For sample and literature, address The Abott Alkaloidal Co., Ravenswood Station, Chicago, Ill.

It is necessary every so often to "flush out the sewers" in order to remove dirt and filth accumulations, and this is certainly demanded following a hard, cold winter. The tissues become loaded with retained katabolic products, elimination is sluggish, the phagocytes fight against heavy odds, and their "power for good" decreases.

For these conditions, force the elimination by giving Saline Laxative or Salithia, to "clean out" and flush bowels and kidneys; prevent decomposition and re-absorption of poisonous material by administering W-A Intestinal Antiseptic; eliminate with Calcalith, tone up with Sanguiferrin. Your cases will recover rapidly.

For sample and literature address The Abbott Alkaloidal Co., Ravenswood Station, Chicago.

J. Wm. Henry, M. D., Brooklyn, N. Y., states: "Aside from the ordinary value of Glyco-Thymoline in its use on abnormal mucous membrane, I consider it of extreme value in the treatment of diphtheria. In a recent case of the most severe type, in which every symptom pointed to a discouraging prognosis, I used Glyco-Thymoline by spray and swab with the ordinary constitutional treatment. The temperature soon lowered and the crisis was passed without serious trouble, much to my surprise and gratification.

In tonsillitis it has been my standard treatment for some time. Its action is quick and the effect was very agreeable to the patient."

After-Treatment for Malaria.—Regarding after-treatment for malaria, the following is most excellant:

℞ Tr. fer. mur., f ℥ ii.
Strych. sul., gr. j.
Liq. arsen. potass., ℥ ij.
Tr. capsici, ℥ iij.
Acid. phos. dil., ℥ iij.
Glycerin, q. s. ad ℥ viij.

M. Sig.: One teaspoonful three times a day in water. Protect teeth with squill or alkaline wash. Label "Shake"

Battle & Co., Chemists, St. Louis, Mo. —I have the pleasure of telling you of a most remarkable experience I had with the bottle of ecthol you kindly forwarded me last month. When I received the sample of ecthol I had been treating a young man about ten days for what I diagnosed as ulcer of the stomach. For a year before coming to me he had occasionally seen dark colored blood in his alvine discharge, and now and then, he had vomited blood of a lighter hue. There was an indurated spot on the body of the stomach about twice the size of a silver dollar, which had been giving him trouble for some time. Could trace no history of cancer in his family. After putting him on teaspoonful doses of ecthol four times a day, he came to my office and smilingly told me the hard spot was gone. I examined him and found it to be true. During this last week he had been on ecthol alone. The vomiting had also ceased and he had gained in bodily vigor. Gave him a second vial of same, cautioned him as to eating and exercise, and discharged him in fine spirits. I wonder if this case can be matched?

JOHN F. NEAL, M. D.

Lytle, Texas, Oct. 14, 1903.

The Treatment of Nasal Catarrh.—Mannon *(Cincinnati Lancet-Clinic)* finds no danger whatever from the use of the nasal douche provided ordinary care is taken and a proper solution is employed. The charge that post-nasal douching is prone to excite inflammation of the middle ear he does not find sustained. All leading specialists employ this method of treatment in the posterior as well as in the anterior nares with equal good results. The doctor has had chronic nasal catarrh of many months duration yield to douching when heroically employed. Listerine, to which a small quantity of bicarbonate of soda has been added, is his main stand by. If hemorrhage is a controlling feature he uses instead a saturated solution of tannic acid to each ounce of which ten grains of carbolic acid has been added. When the tendency to bleed ceases he returns to the Listerine solution. Treated in this way the most pronounced cases yield in three or four weeks are not prolonged by complications or sequelæ.

Pure-Food Inspection Law.—Dr. Harvey W. Wiley, under whom, as chief of the Bureau of Chemistry of the Department of Agriculture, the inspection of all foods and wines imported into the United States must pass, recently reported as a result of such inspection that twenty samples, or about 10 per cent. of 205 invoices examined, had been condemned.

Of these twenty samples five were of Rhine wine, and contained salicylic acid; two of white wine, Sauterne, and contained sulphurous acid; four of olive oil, containing cottonseed oil, and misbranded; three of frankfurter sausage, containing harmful preservatives; four of vegetables in cans, with lead tops touching the food; one of vinegar, misbranded and made from distilled alcohol, and one of coloring matter for foods, in which coal-tar dyes were used.

In view of the rigid methods of examination adopted under the new law, which condemns and excludes impure and misbranded foods and wines, it is pleasant to announce that Mariani's wine is found, by careful analysis, to be absolutely pure. Thus an additional recognition of merit is accorded this reliable preparation by an official endorsement of the United States government. This excellent provision against

the introduction of impure and adulterated foods is in conformity with similar stringent foods laws operative in France, Germany, Russia and elsewhere abroad.—*The Coca Leaf,* November, 1903.

Aural Congestion with Threatened Abscess. By C. L. Steensen, A. M., M. D., Professor of Materia Medica, New York. Author "Naso-Pharyngeal Disorders," etc., etc. I would like to mention to my confreres that, in the treatment of acute attacks of auraul congestion, with every indication of suppuration, both interna[1] and external, and seriously jeopardizing the tympanum, and not infrequently with evidences of threatening abscess, accompanied with the most lancinating pains, I have prescribed Antikamnia and Salol Tablets with most satisfactory results. The congestion, fever and pain promptly yield to the persistent use of these tablets, and to attain this I ordered two tablets to be given every two hours. I am firmly convinced that with careful ablution and syringing of the external aural cavity with a mild antiseptic and anodyne solution, and the administration of this remedy, I have aborted the threatened attack and thereby undoubtedly saved the patient from a suppurative sequela, and no doubt in many instances, from operative interference, necessitating the trephining of the sphenoid, or the opening of the antrum to save life. As every practitioner knows, the operation is not infrequently fatal, particularly if the case be an advanced one and the patient an aged one.

As to the local application, I simply resort to tepid water, to which may be added a mild antiseptic, say, five grains boric acid to each ounce and a little tincture opium. This makes an admirable application. This solution carefully injected from two to four times daily to warm and cleanse the vestibule of the ear, and with the administration of Antikamnia and Salol Tablets, or Antikamnia and Codeine Tablets, the practitioned will be rewarded with most gratifying results.

The Propriety of Bearing Testimony to True Merit.—In a practice of over fifteen years I do not think I have written over three or four testimonials for proprietary medicines, but I cannot see any impropriety in bearing testimony to a truly meritorious remedy, and especially where that remedy has stood the test of time with thousands of physicians, who, with one accord, verify its curative virtues in a certain line of disorders. This is true of the preparation, Sanmetto, which I consider a wonderful remedy and almost a specific in all inflammatory diseases of kidney and bladder. I prescribe it daily in my practice, and it has never yet disappointed me, but has frequently surprised me by its wonderful curative powers. When I am called to treat a case of cystitis my thoughts revert to Sanmetto. In fact, I have learned to associate Sanmetto with cystitis, and from the thousands of testimonials received, and the number of favorable reports in the medical journals, I hardly see why the manufacturers of Sanmetto desire more. It seems to me that a physician who does not know of the virtues of Sanmetto is very far behind the age.—*W. P. Hough, M. D.,* Columbia, La.

In Spite of Teachers and Text-Books.—The days of the cotton jacket and the linseed poultice seem to be past. Perhaps the applications valued most highly by medical teachers at this time are the cold ones, either in the form of ice bags or cold compresses frequently

changed. These, when placed over the seat of disease, seem to give decided relief, to modify the temperature, and to hasten early resolution. But in spite of their advocacy in the text books, the rank and file of the profession do not take to them kindly.

Antiphlogistine now enjoys perhaps greater popularity in the treatment of pneumonia and other acute respiratory diseases than any other local application. This popularity seems to be well-deserved. It may not modify the course of the disease to any great extent, but it certainly proves of the greatest comfort to the patient, and helps to ameliorate some of the troublesome symptoms which are characteristic of the disease. Antiphlogistine must, therefore, be considered a distinct addition to our therapeutic armamentarium.—*The Medical Standard,* March, 1904.

A Physician Writes.—"Messrs. Fairchild Bros. & Foster, New York city:

"Dear Sirs,—Regarding your preparation, 'Peptogenic Milk Powder,' I have to say that for some time it has had a limited use in my practice, but not until I used it with my own child did I fully appreciate its merits. My child, now six and one-half months old, has for six months been fed exclusively on milk modified by this excellent preparation, and I could not wish for a more perfect artificial infant food or for better results than those obtained. I am now using it almost exclusively where artificial feeding is required in my practice and with most gratifying results.

"Very truly yours,

(Signed) M. D.

"N. B.—Should the above be of service, you are at liberty to use it by omitting my name, which you may, however, supply to the profession if any desire it, in a private way."

In the May number of *Wayside Tales,* just out, appears a cracking good story, "The Rise of Doctor Russell," by Dr. Alex. V. Graftrom, of Jamestown, New York, which possesses an unusual interest for the medical fraternity. Dr. Graftstrom was formerly house physician of the City Hospital, Blackwell's Island, New York. Two years ago, he published an interesting book, "A Text-Book of Mechano-Therapy," (Massage and Medical Gymnastics) which is recognized as a standard volume on the subject. That his literary work, however, is not confined to medical literature, readers of the current magazines are well aware.

Milk Prepared With the Peptogenic Milk Powder.—By the regular directions gives a food for infants which is practically identical with average normal mothers' milk in every physical characteristic and in analysis.

The success of this food in practice proves that "the best artificial food for an infant is that which most closely resembles mothers' milk." Thousands of healthy and "hearty" infants are being brought up on milk prepared with the Peptogenic Milk Powder every year. These infants escape in a great measure the digestive troubles that are incident to infancy, are strong in bone and muscle ,have god teeth and get them easily, and at the proper time they are weaned with but slight disturbance of digestion and with little trouble or annoyance to anybody.

Even when the Peptogenic Milk Powder comes into use as a last resource, after "foods" of all kinds have been tried and the conditions are almost hopeless, it often proves a veritable life

saver. In these cases it is remarkable that as a rule improvement begins from the very first feeding of this food which is like mothers' milk. The few reports that follow are representative of the many that we are constantly receiving from physicians and parents:

April 15th, 1903.

"All Sorts of Foods."—A baby who weighed six pounds at birth, and was perfectly healthy, was fed on all sorts of foods, and at four months weighed five and a half pounds.

Milk Prepared with Peptogenic Milk Powder was then given; improvement began at once, and at five months, the weight was eight pounds; at eight months, seventeen and a half pounds.

Cocoa is the leaf of an Erythroxylon shrub indigenous to equatorial America, employed during many hundreds of years, empirically, as a sustainer and restorer of muscular force.

There are several varieties of Cocoa, among which the aromatic or "sweet" leaf contains little if any cocaine, and it the only kind used by the natives. This is the Classic Coca to which phenomenal properties are ascribed. The "bitter" leaf which they reject, is exclusively employed for cocaine extraction. Even since the popular introduction of cocaine, the natives will not use that alkaloid which creates excitement without sustaining muscular power. Thus it is shown, even empirically, that the properties of true coca cannot be substituted by cocaine. A fact upon which all observers agree, but which is not generally recognized.

Mariani, of Paris, was the first to introduce coca in available form; he recognized nearly half a century ago the great difference in cocoa leaves, and by a special blending of the sweet leaves, carefully treated in nutritious French wine, produced his unequaled neuro-muscular stimulant, which, as a trustworthy preparation, has won high standing in the profession abroad and in this country by all practitioners who have subjected it to test.

Sanmetto Incomparable With Any Other Known Remedy for Genito-Urinary Diseases.—Sanmetto is not new to me. The fact is, I have prescribed many gallons of it in the past eight years. I have never taken a dose of it myself, but suddenly feeling a need for it, I have ordered a bottle of it to take myself. Now as to the value of Sanmetto, it has never failed to produce beneficial results in my hands, and as a tonic and vitalizer to the genito-urinary organs it is not only unequal, but in comparably better than any other known remedy.

J. W. Mitchell, M. D.

Harrisburg, Ills.

There is still some difference of opinion among physicians as to whether the preparations of the active principles of cod liver oil fully replace the administration of the oil itself. There can, however, be no difference of opinion as to the superiority of these preparations during certain periods of the year. During the summer months especially we have found them of great use, for there is a marked loathness on the part of patients to take emulsion or preparations having an oily nature. Among these preparations we have found Hagee's Cordial of Cod Liver Oil one of the most satisfactory. It is exceedingly palatable, can be taken by those with the most delicate digestion, without any disturbance of the same, and its effects are rapidly observed.—*Colorado Medical Journal.*

Milk Diet in Intestinal Catarrh.—An exclusive milk diet should have a trial in every case. Skimmed milk can be taken in larger quantities and with less repulsion, and is therefore to be preferred. The exclusive milk diet can be varied with buttermilk, koumiss or wine-whey; and fruit juices, as orange juice, lime juice or tarmarind water please the patient without doing harm. In the case of adults as well as children the milk is made more digestible by diluting it with barley water, or rice water, or by adding transformed farinaceous food to milk in the form of Mellin's Food and other foods of this class.—*From the Pepper's "System of Medicine."*

Summer Diarrhoea in Infancy.—"It is necessary to prevent, as far as possible, the great coagulating effect that the lab-ferment of the infant's gastric juice has upon the casein of cow's milk; and this is satisfactorily accomplished either by adding an alkali, such as lime water, or some mucilaginous material such as barley water or Mellin's Food. In this way the casein curd is rendered loose and flocculent, and more like that of human milk."—*From "Diseases of Infancy," by J. W. Ballantyne, M. D.*

"Many a man is today worrying over a case or two of pneumonia, pleurisy or capillary bronchitis, whose troubles would flit away like mist, did he but know enough to put his patient into a jacket of Antiphlogistine."—*Medical Summary*, Nov., 1902.

Hysteria is the expression of one form of nervous debility. Celerina is thus peculiarly indicated because of its tonic effect on the whole nervous system.

In the convalescent stage of "La Grippe" and other diseases Gude's Pepto-Mangan is indicated as a general tonic and reconstructive.

A Remarkable Case of Gout With Rapid Relief.

By Dr. E. Pettit (Paris.)

The patient, Monsieur Leon V. E. aet. 42, a prominent musician, had been subject to gout for some years, and at the time I saw him was suffering from an acute attack which paralyzed his right arm so that he was incapable of lifting it even with great effort.

The pain, swelling and inflammation, was most severe.

The patient had an important engagement to play at a concert that same evening and it was too late to get any one to replace him, so that he was very anxious to obtain even temporary relief.

I recommended local application of betulol (methyl-oleo-salicylate comp.) and prescribed one capsule of colchi-sal every quarter of an hour for the first hour, and again, after an interval of one hour, one capsule every half hour until relief was obtained.

On calling again the same evening, I was surprised to find the patient dressed and about to leave the house for the concert room, where as a matter of fact, he was able to play as well as usual.

I found on inquiry, that he had either misunderstood my instructions or intentionally taken *fifteen capsules within an hour!*

No ill effects followed and the attack of gout did not reoccur for some time, although no great precautions were taken as to diet.

Patient describes having experienced "a peculiar sensation" after taking the fifteen capsules, but says he was able

to use his arm without the least difficulty or pain.

Such heroic doses of colchi-sal are not desirable or to be recommended under any circumstances, but this case clearly proves that this combination of colchicine and mthyl salicylate can be given without untoward results, whereas, I am inclined to believe that colchicine alone might have produced serious consequences (the amount taken in one hour in the form of colchisal being four milligrams).

The depressing effects of colchicine on the heart and the violent irritation produced by this alkaloid on the mucous membrane and epithelial tissue (which have been known to cause death in some few cases of granulated kidneys), seems to be avoided in colchi-sal, owing to the prompt elimination of the drug which prevents accumulation in the system. This rapid elimination is due to its combination as a compound colchicine-methyl-salicylate.

The normal dose of from twelve to sixteen colchi-sal capsules in the twenty-four hours, has never produced untoward after effects in my hands.—*Translated from the Revue de Pharmacologie Medicale.*

Gude's Pepto-Mangan, if we look over the field of preparations launched upon the market, claiming to be "just as good," "just the same," etc., and now relegated into oblivion, we will find their name is legion. Since its introduction to the medical profession of America, many manufacturers through their representatives have heralded competing products as possessing wonderful medicinal properties. They were tried, found wanting, withdrawn from the market, and today find a resting place in some upper loft labeled, Deadstock. "Gude's" has stood the test of clinical investigation in both private and hospital practice; moreover, it has been before the profession during the last 12 years, and during this period has steadily grown in favor.

When an internal mucous astringent is indicated, in such cases as Cholera Infantum, etc., Kennedy's dark pinus canadensis should be given in an alkaline medium.

MEDICAL NEWS AND ITEMS.

Dr. Baxter Byerly has moved to Coole Mill, N. C.

Dr. J. T. Burrus, of Jonesville, has located in High Point, N. C.

Dr. J. M. Stansill, of Rockingham, N. C., died April 26th.

The Texas State Legislature has made a grant of $5,000 toward the establishment and maintenance of a Pasteur Department for the treatment of hydrophobia in the State, in connection with the State Lunatic Asylum at Austin and under its management.

An effort is being made to drive out the thousand odd unlicensed practitioners who are doing business in Tennessee. They were compelled to submit to the regular State examination held on April 6th, and only those who were successful will be permitted to continue practice.

A bill has been introduced in the United States Senate providing that all physicians who have practiced medicine in any State of the Union for ten years or more shall be allowed to practice in the District of Columbia without further examination on payment of a fee and the exhibition of a certificate of

good character.

It is rumored that Professor Koch intends to resign his appointment as chief of the Royal Institution for Infectious Disease and to settle in South Africa.

Dr. Nicholas Senn, who offered his services to the Red Cross Society of Japan, has received a reply from Baron Hashimoto to the effect that the organization has not the power to accept the proffer of assistance.

The statistics of the New York State Commission in Lunacy show that there has been an increase in the number of insane in the State during the past year amounting to about 40 per cent. above the normal. The observations of the commissioners indicate that there is a relation between the increase of insanity and the development of industries which is sufficiently pronounced to render doubtful the popular belief that the isolation and the monotony of farm life are conducive to insanity, especially among women.

Building Commissioner Williams, of Chicago, has notified those in charge of the smaller hospitals in that city that they must receive no new patients in their institutions until certain specified building changes are made

The Senatus Academicus of the University of Edinburgh has awarded the Cameron prize in practical therapeutics to Professor Niels R. Finsen, M. D., of Copenhagen, in recognition of his pioneer work in connection with the application of light rays to the treatment of disease.

The Harvard Medical School experts who are going to the Philippines to study smallpox germs have a method in their apparent mania. They will carry on their operations in some of the distant islands of the archipelago, not because smallpox prevails there, but because monkeys are many and anti-vivisectionists few.

A bill is now before Congress providing for an increase in the medical corps of the army.

The chemical laboratory of the Ohio State University at Columbus was totally destroyed by fire February 19th. The loss is estimated at $100,000. There is no insurance.

The Pennsylvania Society for the Prevention of Tubeculosis has determined to begin an active campaign for the prevention of the spread of tuberculosis as well as other infectious diseases.

Daily papers inform us that the Russian admiral in charge in the far East is suffering from the effects of a severe nervous depression. One of our readers asks, "Is it not possible that his disease is in reality chorea?"

Official figure show that in German cities of 15,000 or more inhabitants tuberculosis has been steadily decreasing fatality.

The food test at the Department of Agriculture which has been going on for several months past, to test the effect of salicylic acid on human health, has brought out some queer results. The general fact is established, says *American Medicine,* that salicylic acid seriously injuries health. One man, however, has reason to rejoice in the salicylic acid treatment. It has cured his rheumatism. The experiments have been abandoned to save the subjects, but will be resumed when the men have recovered somewhat from the effects of the past two months' diet on prepared foods into which salicylic acid entered as a preservative. Dr. Wylie says that he expected this result. This experiment has turned out just as did that with foods preserved with borax. That made all the men sick.

The Clinical Application of Ingluvin

Ingluvin is the name given to a preparation made from the gizzard of the domestic fowl. Since its introduction, no remedy of modern times has attracted more attention among physicians far and near nor received higher endorsement than Ingluvin, which is now supplied throughout the world. The product occurs in the form of a soft powder of a yellowish-gray color and a faint odor. It is almost devoid of taste. A slightly bitter after-taste is left, but this soon disappears. Ingluvin is insoluble in water and the usual menstrua. It can be administered, stirred into water or milk, or in tea, coffee, chocolate, wine, etc., if no therapeutical objection exists. Its feeble taste is easily disguised. Ingluvin is also put up by its manufacturers (Messrs. William R. Warner & Co.) in convenient 5 grain tablets. The dose of Ingluvin is from 5 to 20 grains. Spread upon bread and butter it may be conveniently administered to children. Ingluvin possesses the advantage of being compatible with alkalies.

As the gizzard contains no peptic glands, the undoubted efficacy of Ingluvin cannot depend upon the presence of a digestive ferment analogous to pepsin. It has been ascertained that its virtues reside in a peculiar bitter principle which enters into its composition. It is prescribed in the same manner, doses, and combinations as pepsin.

Ingluvin is prescribed in the vomiting of Pregnancy, Dyspepsia from Uterine Disease, Colic, vomiting caused by Alcoholism, and other digestive derangements. It is likewise beneficial in dyspepsia when produced by functional inactivity. It will promptly check the diarrhœa which is caused by indigestion. By reason of its influence upon the stomach and bowels, Ingluvin is capable of marked service in cases of cholera infantum and cholera morbus.

The evidence in favor of Ingluvin in all cases of gastric disturbance is overwhelmingly convincing as to its superior efficacy over pepsin, and its use should never be neglected in any case of gastric irritability, no matter what may be the cause.

From the preceding abridged account it will be seen that Ingluvin possesses an exceedingly important sphere of usefulness. Disorders of the alimentary canal exert such a widespread influence, they are so often linked with profound general disturbances, and they are so distressing in themselves, that any remedy which demonstrates its efficacy in regard to those affections should be warmly welcomed.

Sample and Recent Literature free on request.

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THERAPEUTIC HINTS.

Chronic Dyspepsia in Children.

In the treatment of chronic dyspepsia in children, which term includes all the digestive disorders of childhood which are not acute, and not merely symptomatic, W. R. Jordan, in *Merck's Archives,* states that drug treatment is necessary in all cases. During an actual catarrhal attack, or where the subjective symptoms are prominent, the author recommends the following to be given three times a day before meals:

R.	Sodii bicarb.....gr. vi	40
	Tinct. nucis vom.	
	Spts. chloroformi, āā...gtt. ii	12
	Aq. menth. pip. q. s. ad..ʒ ii 8	

M. Sig.: At one dose, to be repeated before each meal.

If constipation is present it must be corrected. For this purpose he recommends cascara combined as follows:

R.	Ext. cascaræ sagradæ flu. m. x	65
	Tinct. nucis vom.....m. ii	12
	Tinct. belladonnæ.....m. v	30
	Glycerini m. x	65
	Aq. menth. pip. q. s. ad...ʒ ii 8	

M. Ft. haustus. Sig.: To be taken at one dose, at bed-time.

In some cases the constipation may be relieved by the administration of rhubarb or magnesia before meals. When the constipation has ben corrected the following should be prescribed to increase the strength and appetite of the patient:

R.	Tinct. ferri chloridi...gtt. lxxv 5	
	Liq. strych. (1 per cent.). gtt. vx 1	
	Aq. chloroformi q. s. ad....ʒ iv 120	

M. Sig.: Two teaspoonfuls after each meal in water.

Where headaches of more or less distinctly periodic type complicate the condition, the author recomends antipyrin in 5 grain (.30) doses two or three times daily. The diet must be regulated by the prohibition of sweets, pastry, pickles and tea especially during the attack. In severe cases the diet may be restricted to beef tea and mutton broth, with dry toast, gradually introducing milk and meat into the diet. Later and in milder cases the following rules should be observed: Meals at regular intervals, not too long; nothing between meals; no tea or coffee, no pickles, no sauces or highly seasoned fod. Potatoes should be elminiated from the diet until convalescence. The abdominal organs and thighs should be well protected by the clothing, while not too thick and heavy over the chest. The parents should then be instructed to take the child out of doors into the open air to a generous extent. Children under eight should be kept away from school, and no child should be allowed to go to school who is described as eating no breakfast."

Worth Investigating

The successful treatment of consumption, scrofula, and wasting diseases generally, is a subject in which every physician is deeply interested. Hydroleine (hydrated oil) simplifies the question to a remarkable degree.

As a food for fat-starved tissues, nothing is equal to cod-liver oil, and Hydroleine is a preparation of the oil which insures its complete assimilation, because it is pre-digested by the use of pancreatine. It is stable, unirritating and free from rancidity, containing only the purest oil preserved by a minute quantity of salicylic acid; and through the agency of soda the pancreatine is protected from neutralization by the acids of the stomach.

In short, Hydroleine is prepared in strict conformity with the true principles of the digestion of fats and is unequaled

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Sold by druggists generally.

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Samples free to physicians.

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P. B. BARRINGER, M. D., Consulting Physician.



D. M. TRICE, M. D., Resident Physician.

An easily accessible but secluded **HOME** for the private treatment of **Mental** and **Nervous Disease, Alcohol** and **Drug Habitues**. An old Colonial place, over 100 acres, mature in grove, grass and vine; new only in equipment. Buildings brick, with brick partitions; 250 feet of wide veranda; new lighting plant; new hot water heating plant, besides open fire-places in every room. Billiards, pool, golf, tennis, etc. Committed or voluntary patients received. Sanitarium one mile from station; macadamized road; long distance 'phone 149. Carriages meet all trains on call. **Address Box 48, Charlottesville, Va.**

BOOK REVIEWS.

VON BERGMANN'S SURGERY. A System of Practical Surgery. By Drs. E. von Bergmann, of Berlin, P. von Bruns, of Tubingen, and J. von Mikulicz, of Breslau. Edited by William T. Bull, M. D., Professor of Surgery in the College of Physicians and Surgeons (Columbia University), New York. To be complete in five Imperial Octavo volumes containing over 4,000 pages, 1,600 engravings and 110 full-page plates in colors and monochrome. Sold by subscription only. Per volume, cloth, $6.00; leather, $7.00; half morocco, $8.50, net. Volume I just ready. 936 pages, 361 engravings, 18 plates. Lea Brothers & Co.

This system of surgery by von Bergmann will be complete in five volumes. The first volume, which is now ready, covers the following subjects: Injuries and disease of the Skull and its Contents; Malformations, Injuries and Diseases of the Ear; of the Face, including Plastic Operations and the Neuralgias of the Head; of the Salivary Glands, including Anomalies; of the Jaw; of the Nose and its Adjacent Tissues; of the Mouth and of the Pharynx.

The second German edition, carefully revised and brought up to date, is the basis of the present English translation. The work has been done by the well-known surgeon, Dr. Wm. T. Bull and his collaboralors. They have added to the text methods of practice which have gained the preference of English and American surgeons; they have also largely added to the illustrations, which

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Every syringe is carefully annealed; there is no danger of a broken syringe injuring your hands.

Should you not be acquainted with Mulford's Serum-Syringe we shall be glad to forward a water-filled syringe for demonstration, with valuable literature on Antitoxin and Vaccine.

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Quinine, Iron and Pepsin Tonic.

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The first volume, 14th series, International Clinics, is full of high-garde material, handsomely printed, illustrated and bound and is issued quarterly at the remarkably low price of two dollars per year. This number surpasses all former ones that it has been our pleasure to review.

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reviews of the Progress of Medicine for 1902 by Edsall, of the University of Pennsylvania, and of Surgery by Bloodgood, of Johns Hopkins, and are more than worth the cost of the book.

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cretion and assimilation of their patients. All such will agree with Von Noorden, 1, that there are numerous forms or manifestations of self-poisoning; 2, that the acid forms are among the gravest of them, and 3, that those special perversions of metabolism resulting in the excessive production of oxybutyric acid, diacetic acid and acetone, which so greatly endanger diabetics and also compliate at times other diseases more or less seriously, are of the utmost practical importance.

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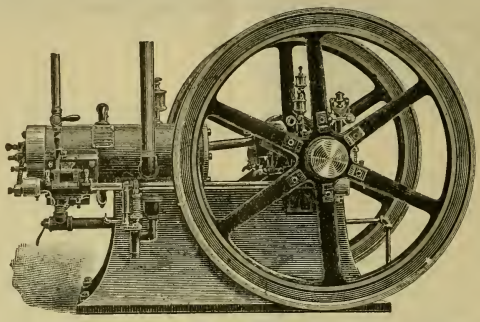
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EVERYBODY'S MAGAZINE FOR MAY. A happy characteristic of *Everbody's Magazine* is the versatility exhibited in its contents-table. The editors are not rive ted to a single set of ideas, but manage in each issue to strike some new note or touch some novel phase of life or endeavor. There are two salient features in the May issue, which, though serious in tone and treatment, are of so much importance to the world just now as to have an almost sensational interest. One is on the Great White Plague, Consumption; the second, the subject which the Methodist Church Conference is debating with so much ardor—the relation of Christianity to amusement: may the Christian dance, play cards and attend the play? The ablest of American churchmen—such men as Cardinal Gibbons, Bishop Greer, of New York, Dr. Parkhurst, Dr. MacArthur—have contributed to a symposium opinions which, stating the attitude of the great denominations on the subject, are of the greatest value to all readers.

It may not be generally known that one-third of all the people who die between the ages of twenty and thirty die of consumption, and that in the United States 160,000 every year die of this terrible disease. The magazine offers a direct, strong, common-sense article on the great white plague, by Eugene Wood, in which he t lls in plain terms how to know consumption if you have it, how to cure it, and how to avoid giving it to your fellow.

In addition there are eight capital stories—one by the popular O. Henry. is an article about the Passing of Finland; Dorothy Dix tells of "Woman's Inhumanity to Woman," and Juliet Wilbor Tompkins writes about "A Clearing-House for Rabies."

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Gastric Ulcer.—J. B. Woodville, in *Therapeutic Gazette* for October, advises the treatment of gastric ulcer with large doses of subnitrate of bismuth. In treating gastric ulcer, he restricts the diet within narrow limits, allowing nothing by the mouth save sweet milk in such quantities as can be easily digested in each individual case. He also allows the white of one or two eggs beaten up in half a glass of water at intervals of three or four hours. Further nourishment is given per rectum if needed. The subnitrate of bismuth is given in doses of 45 to 120 grains suspended in half a glass of milk three times a day, and is continued without intermission for three weeks. Usually at the end of this time he begins to gradually increase the diet by the addition of animal broths, soft boiled eggs and crackers. He has never seen any indication of poisoning by these large doses of bismuth. He keeps the bowels open by daily rectal injections, giving no cathartic by the mouth.

The Anterior Fontanel.

(*Clemens in Medicine,* March 1904.)

The conditions of the anterior fontanel is depressed in wasting diseases and in acute diarhœas. In true meningitis the anterior fontanel bulges and there is extreme tension, while in the false meningitis of acute diarrhœa the fontanel is depressed. In differential diagnosis of true and false meningitis compare the fontanel with the abdomen, as per the following formula.

	Fontanel	Abdomen
True Meningitis	Bulging	Retracted
False Meningitis	Depressed	Distended

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The Chicago Pasteur Institute's director, Dr. A. Lagorio, reports that since the institute was opened July 2, 1890, 2,026 patients have received the anti-hydrophobic treatment. Of these 1,807 had been bitten by dogs, 76 by horses, 57 by cats, 19 by cows, 18 by skunks, 25 by other animals, and 22 were infected by hydrophobic human beings. Of individuals bitten by animals absolutely known to have been rabid, 982 were treated; of patients bitten by animals presumed to have been rabid because of symptoms of disease during life, 776 were treated; while 268 cases were cared for in which rabies was suspected. Only seven deaths were reported, a mortality of 0.34 per cent. Six individuals abandoned treatment, two of whom subsequently died from hydrophobia.—*Medical Record.*

The number of suicides from carbolic acid, and the ease with which this poison can be obtained without the prescription of a physician, have led to the drafting of an ordinance by the Chicago Retail Druggists' Association which contains the following provisions: "Every druggist or other persons who shall sell or give away any carbolic acid or any solution thereof containing more than five per cent of carbolic acid without the written preschription of a physician, except as hereinafter provided, shall be fined not more than $25.00 for each neglect. It shall be lawful to sell without the prescription of a physician a mixture containing equal proportions of carbolic acid, glycerin, and alcohol." —*Journal of the American Medical Association.*

The American Society of Tropical Medicine, organized in Philadelphia, has applied for a charter.

Dr. William Osler, president of the Association of Medical Librarians, has issued a circular appeal urging support of the *Medical Library and Historical Journal.*

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Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy :

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Dr. Osmon Royal, under date of June 4th, 1903, writes :

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E. V. Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

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Professor Paterno, an Itlaian, has suggested a process for the purification of drinking-water which constitutes a great step forward in the study of this important problem, says the *Tribuna,* Rome. From numerous and extensive experiments by this author it appears that by adding to impure water, even that containing pathogenic microbes, an extremely small quantity of silver chloride, there is accomplished the complete disinfection of the water. For this purpose 2 mg., or at most 2½ mg., of the chloride is sufficient to absolutely sterilize a liter of water and to eliminate every danger of infection. The sterilization is completed in a few minutes—ten at the most—and no apparatus is necessary beyond a small vial with a solution of silver chloride.

The Mexican government has determined, says the *Medical Record,* to make an earnest atempt to rid its Gulf Coast of the yellow fever courge. The Supreme Board of Health has at its disposal $7,000,000 for the work of rehabilitating Vera Cruz, and the greater part of this will be devoted to sewerage and drainage work. The town is divided into four districts with a medical officer in charge of each. Each one of these medical officers has under him a large corps of sanitary inspectors. A thorough tour of inspection is made of all suspected or infected districts each day and each evening and a report is made of the number of cases in each district. Oil is being used freely. Marshes surrounded Vera Cruz, and every possible precaution is taken to diminish the number of mosquitoes coming from them.

The contract for building a new naval hospital at Washington has been awarded.

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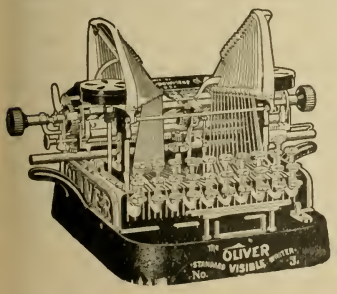
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In amputations about the fingers it is well to be chary of removing the proximal phalanx if it can be saved. While the final result might possibly be more esthetic, or while the power of flexion might be lost if the phalanx is retained, yet it usually forms a valuable opposing surface for the thumb, particularly so if only a short stump of the latter is left. The thumb itself should always be left as long as the nature of the injury allows.

In extensive contused and lacerated wounds hemorrhage is apt to be small in amount, but the surgeon must always be on the lookout for the period of reaction during which secondary bleeding is apt to occur. In such wounds it is well to search for and tie any vessel of importance that must have been severed, even if it does not bleed, and to remove the dressings at least partially every twelve hours to see that they are not blood-soaked, while also loking for the physiological signs of hemorrhage.

In gunshot wounds of the skull, when the missile has entered the brain substance, the only absolutely necessary procedure is to disinfect the parts as carefully as posible. The bullet itself is generally less dangerous than efforts blindly made to recover it, and it is certain that in a large number of cases a far larger percentage would recover after a plain antiseptic dressing than after the latter preceded by exploration. Depressed bone is to be rmoved or uplifted, fragments taken away, but it is seldom that doing more than this is advisable, unless the bullet is in plain sight.

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Etiology of Dysentery.—The Berlin correspondent of the *Lancet,* November 28, quotes an account which Staff Surgeon Dr. Jurgens published in the *Deutsche Medicinische Wochenschrift,* concerning bacteriological researches carried out by him during an epidemic of dysentery which broke out in a regiment in the exercise camp of Gruppe, in Western Prussia. "The epidemic," says the correspondent, "extended to twenty-six men who presented typical symptoms—namely, severe diarrhœa, hemorrhage from the bowels, and prostration. These twenty-six men were admitted into the military hospitals, and in addition to them were a number of men who suffered from diarrhœa and were treated in the barracks. All the patients recovered in from three to four weeks. The microscopical examination proved that neither entamœba histolytica nor any other protozoon was present in the bowels. Bacteria, of course, were present, and Dr. Jurgens detected a bacillus very similar in form and culture characteristic to Kruse's dysentery bacillus, but showing differences under the agglutination test; probably this bacillus is identical with that discovered by Dr. Flexner in the Philippine Islands. In other epidemics of dysentery, Kruse's bacillus is commonly found in pure culture in the bowels during the first days of the disease, and this bacillus is therefore believed to be the specific germ of dysentery, although the bactericidal action of the serum against the bacillus has not yet been ascertained. In the recent epidemic the bacillus of Dr. Jurgens was agglutinated by the blood. Serum of almost all the patients, both during the attack and during convalescence. The serum taken from patients up to the second day from the beginning of the illness had no agglutinating effect, but on the third day, and afterward, it agglutinated the bacillus of Dr. Jurgens, but

(*Continued on Page* 398.)

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not the dysentery bacillus of Kruse. Dr. Jurgens therefore infers that the etiology of dysentery is not in all cases the same, as it is not caused always by Kruse's bacilli, but sometimes by another species. The disease, though a definite entity as to its clinical symptoms, shows marked differences from a bacteriological point of view."

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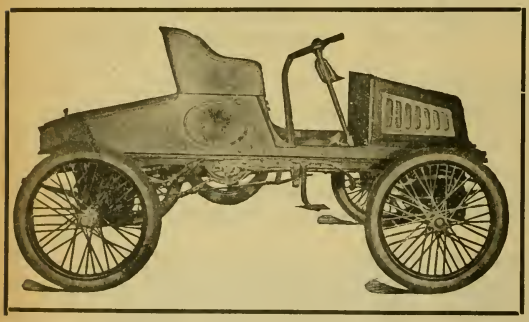
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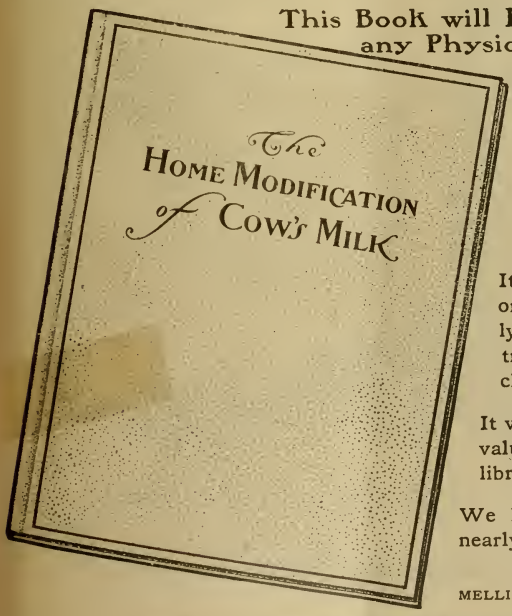
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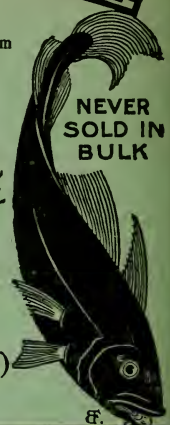
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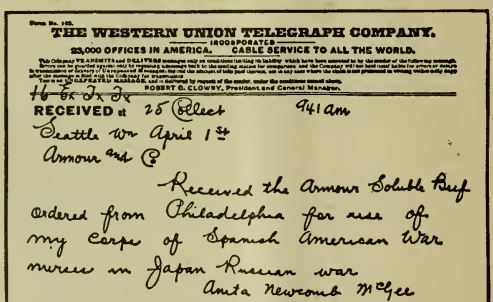
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Illustrations necessary to elucidate the text will be provided without expense to authors when suitable ink drawings or photographs are furnished.

Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Annual Oration--Aesculapian Dreams

By Chas. A. Julian, M. D , Thomasville, North Carolina. Vice-President elect North Carolina Medical Society; President Davidson County Medical Society; Physician to Thomasville Orphanage Infirmary, Etc.

Since the creation of man human beings have been seeking after knowlelge, and we, not unlike our forefathers, are striving to solve some of the problems of art and nature. To inquire into the history of the past seems to have been a stimulus that has urged us to rival our predecessors and to take the places of those who will soon rest from self, fellowman and country. Then we should not look with a superficial eye upon the duties that will soon devolve upon us.

One thousand years ago man thought that science was at the zenith of its glory, but men have been endowed with minds of greater depth, they have been giving proof of their comprehension, of the practical problems, they have been roughly called upon to solve and as the mind of man has gradually expanded, science has made so much progress that the minds of the greatest cannot appreciate her progress.

As early as the sixteenth century the development of medical science had introduced the leaven which, from that day to this, has never ceased to work. Scattered over the world, even in far Siam and the jungles of Africa, bodies of men are at work, not in quest of gold or loot or territory, but of means to help their fellows to ward off sickness and unneedful death. Stately pageants and triumphal arches are not for such as these, for they make war not upon men, not upon the weak, but upon the malignant hosts of disease. When the observer's eye is directed to his surroundings and gazes upon what has been done by his predecessors, when we think what almost incredible progress medicine has made, and still more wonderful the brilliant and daring achieve-

Delivered at the Raleigh meeting of the Medical Society of North Carolina, May 23-26, 1904.

ments of surgery, must we say all is done? The wise man not only keeps his inheritance in good repair, but keeps adding to it and submitting something new to the world, new ideas and new discoveries are made every day, and the world is lighted up constantly by the men who have the proper regard for themselves and their fellowman.

An address of this kind is apt to seem to most persons like an idle ceremony. The duties of life are so varied and pressing, its calls so incessant, its vocations so absorbing that there is little time left for indulging the vagaries of imagination. There are few of us, but are prone to seasons of meditation when melancholy visions fill up the gamut of life and the future seems curtained. At such a time it is an experience of the most invigorating nature to find in firm outline the bland sufficing pictures which idealism has been able to gather from the dustheaps of tradition. When a man's mind has reached the receptive stage of entire appreciation toward concepts and revelations of truth he is in a fair way to become the most enviable of men who live for truth and its dissemination among the people of the world. No student of medicine should escape the contagion of optimism, nor can he afford to miss the inspiring sight of a soul poised and balanced on its own pedestal of indestructible right without recourse to tradition. The progress of medicine during the past two thousand years is a subject fraught with powerful and important suggestions to all who interest themselves in the onward movements of the human race. Opinions and events which have entirely altered the framework of the science of medicine, each assuming for itself a prominent place in public consideration have followed each other with a celerity unknown to any other science. "Reverence for the true, the beautiful, and the good has characterized physicians in all times and climes."

The history of medicine is really a history of human discovery. Its inception is shrouded in profound obscurity and so mingled with myth and fable as to be very uncertain, and often made inutile by superstition and ignorance. We can read the history of medicine and comprehend something of the progressive tendencies, for two or three hundred years past, but the work of more primitive ages seems almost beyond our comprehension: nevertheless, they have left their footprints which are fast revealing the great truths of life. The line which separates the ancient and the modern history of medicine can be no other than an imaginary boundary. There is no natural chasm in the train of events, no cessation of interruption in the tide of fate, at which a new era can be counted distinct from and unconnected with the moment that has immediately preceded it. Whenever we assume our station we must still refer to the past, if we would render the future intelligible. "Medicine is a noble art and honorably descended. Apollo was its primary god and his son, Aesculapius, whom the poets also deify, the first professor thereof; for, as in natural things, the sun is the author and fountain of life, so the physician who preserves life, seems a second origin thereof." The Savior, who was the grandest physician to soul and body paid the greatest honor to medicine by making it the standing subject of his miracles, but by his miraculous power he did what is, and always will be impossible for humanity to perform. The laying on of hands, the annointing with oil, the moistened clay,

the word command, clearly and intentionally show that it was by the exercise of divine power, and not by the use of material agencies that the blind saw and the lame walked. These were given to illustrate His divinity, and ceased when He left the earth. Everything is slowly, but surely and constantly changing, never precisely representing any previous condition. Spencer says: "Early ideas are not usually true ideas." Undeveloped intellect, be it that of an individual, or that of the race, forms conclusions which require to be revised before they reach a tolerable correspondence with realities. Were it otherwise, there would be no discovery, no increase of intelligence. The interpretation of physiological facts were at first wrong. Judging from the past, is it not more than probable that many of our present ideas are still erroneous?

In the earlier periods of human existence, man was unable to comprehend the action of natural law. The volcanic eruptions were to them the breathings of the fire gods; the tempest was but a manifestation of the wrath of the god of the winds, who was thus uttering his vengeance against the people; while the thunderbolt was but a signal shot sent at random to remind the people of their wickedness and call them to prayer, or, when fatal, was a swift-winged messenger sent to do the will of the gods. The thunderbolt, the tornado, the earthquake, the volcano, and the ocean's mad lashings convinced the people that gods resided in the skies, in the caves of the earth and in the ocean. During antiquity medicine bore the same mythical ideas, divinities, heroes and heroines were supposed to have invented or cultivated some of its branches. But the Alexandrian school, with Erasistratus and Herophilus at their head, began the teaching of the human structure and thus have physicians been supplied with a clear basis upon which to rest the classification of disease.

Pliny informs us that the kings of Egypt allowed the dead to be opened for the purpose of discovering the causes for disease. Venesection was conceived in the mind of Machaon, the son of Aesculapius. Herodius prolonged life and prevented infirmaty by physical culture, which was the main pillar upon which athletic Greece was built.

The most intelligible and complete writings of antiquity were those of Hippocrates. The term crisis as the climax of morbid phenomena is credited to him and his books were full of the four elements—earth, water, air and fire. The latter will receive the attention of some physicians at some future day. Plato was most fascinating in his teachings and undertook the study of disease by intuition. These ideas were antagonized by Aristotle who taught that all ideas are due to sensation. Herophilus was the first to systematically dissect the human body; he described the membranes of the brain and its vessels, the choride plexus, the vetricles of the brain, the tunica of the eye, the intestinal canal, and certain portions of the vascular system. Erasistratus was the first extensive writer on fevers, hygiene and therapeutics, and regarded most diseases due to overindulgence in food and believed in bleeding and fasting. Galen conceived the idea of vivisection; he exposed the muscles of living animals, and showed how alternate tension and relaxation of distinct groups set the bones in motion. To Galen we owe the division of the body into cranial, thoraic and abdominal cavities.

Oribasius early attached himself to the fortunes of Julian the Apostate, followed him into Gaul, effected extraordinary cures and was almost regarded by his followers as a god. Alexander of Tralles first reported cases of excessive hunger and pain due to intestinal worms. Paul Aegineta was the first to describe and perform the operation of bronchotomy and was also the first to do extraction of cataract. Avenzoar outlined the treatment for renal calculus. Andreas Vesalius revealed his inclination towards anatomy by amusing himself in the dissections of animals. Gabriel Fallopius' researches left their imprint on the human body and one of the important organs bears his name. Ambrose Pare, from an apprentice to a barber-surgeon climbed round after round of ambition's ladder until his name is known wherever the art of surgery is taught. William Harvey, in his search for truth, conceived with difficulty the discovery that revolutionized physiology, but was thought to be demented when he made know the doctrine of the circulation of the blood. Haller's scientific blows felled the doctrine of vital spirits and he became the father of modern nerve physiology.

Rather more than a century ago, a very young physician thought to test a very old-folk remedy against the greatest scourge of that day—Smallpox. His method, slightly elaborated, has served to banish that disease from cleanly lands. But it was merely a chance success won in the dark, to use a large word, a purely empirical discovery. A vision surges up; out of the darkness are shown the strange beginnings of things, rooted like flowers, yet groping out with tendrils towards light and consciousness. What feeling comes to trouble this mystic doze, stir this comatose consciousness? Out of this man has dared to provide the body with new weapons of defence when the infection has come.

There are two torrents that amaze me, the one is Niagara, and the other, the outpouring of science. There be those who cannot bear that Niagara should fall and thunder in mere sublimity, and only to such will this falling thunder of science seem waste. Louis Pasteur followed the customary method of preparing the smallpox vaccine, found that by deliberately cultivating his microbes through a succession of young animals he was able to attenuate the poison they secrete as to make it relatively harmless. Nevertheless, as in the case of vaccination, the fungus thus modified was able, by inducing a mild form of the disease, to confer immunity against a more virulent attack. His dramatic cures of the dreaded hydrophobia gave his ideas a world-wide vogue, and in scarce any land of the earth were there lacking eager spirits to follow out and explore the paths thus so brilliantly opened up. A little later came the discovery that the serum of inoculated animals, the colorless fluid of the blood after the red corpuscles which it contains have been strained out, contains an anti-poison, or as it has come to be known an antitoxine, which, injected into an animal confers immunity in the same manner as inoculation itself. This was the beginning of the "new medicine," and the so-called "Sero-Therapy." If the new methods have not yet been realized all that was hoped from them, it may still be noted that the antitoxine of diphtheria has already saved thousands of little lives. Growth and decay run parallel. Jonah's gourd came up one night and died the next. The thing to believe in

is the gradual and steady pace, but science has proven to us that Radium and the X-rays, those allied new wonders, are more miraculous every day. "Can the Ethiopian change his skin or the leopard his spots?" "Then may ye also do good that are accustomed to do evil." This has always been taken as a biblical and poetical way of expressing an utter impossibility. But when considered more carefully, it does not really seem certain that it implies absolute impossibility. Radium and X-rays have a remarkable effect on the cells of the body, whether in the hair, the skin, or anywhere else. They have a peculiar property of removing coloring matter from the skin and hair. They turn dark hair light and finally white. They remove freckles and burn out the coloring matter. This substance is the charm that will make the negro realize his dreams and enter the portals as white as snow. The discovery of liquid radium will be of incalculable benefit to humanity. Several important branches of medicine and surgery may be revolutionized by the successful harnessing of the mysterious properties of Radium. The value of this latest discovery lies in the ability to transmit properties of radium to water or drugs and in this way reaching the seat of the disease. We have thus the hope before us that the internal administration of Radium fluid will strike at the root of tuberculosis, diphtheria, typhoid, and other infectious diseases and in the protozoal diseases, as malaria and perhaps scarlet fever.

Radio active water is now being given to patients with cancer of the stomach, with decided hope for cure. Induced Radio activity may be described as the property of radium whereby it imparts Radio activity to other bodies in the immediate environment. The normal salt solution is one of the best media for the manifestation of this phenomenon. Human rays or X-rays are excited in one who has bathed in Radio-active water. It is said that the natural springs or Hot Springs of Arkansas have at last revealed her mystery to the scientist. It has been found that the waters and the steam and vapors from the Hot Springs are powerfully charged with Radio-activity. In other words, it is this wonderful new germ killing metal, Radium, which has for centuries been producing the cures which have puzzled physicians and scientists to explain. It has been thought that there is a bed of Radium at a great depth in the earth, beneath these springs, which communicates a strong radio activity to the water. While the strange effects caused by Radium are being observed in all sorts of different places, a new class of rays is puzzling science. These are the N-rays, dicovered by Prof. Blondlot, of France. They are as mysterious as the Radium rays; they are even spoken of by some observers as the human rays. When we are in vigorous health we emit vast quantities of N-rays, and when we grow ill they fade away until we die, when they cease altogether. All these interesting discoveries point to the conclusion that we are living in the midst of a system of invisible radiations, which when they are thoroughly understood, will completely change all our conceptions of physical science and with it the world.

In the mad rush of the present age, that man is indeed fortunate who has the mental equipoise to view calmly and dispassionately the current of events and to form his judgments from the experience and wisdom matured by time, instead of attaching undue importance and weight to the new and

untried things, born of the prevalent spirit of unrest. Almost every year evolves some new surface eddy. Imagination is the pioneer of many minds, opening vistas of vision not to be reached by common eyesight, and crowded with objects some few of which are now and then imperfectly made palpable and visible by the gifted seers who materialize their thoughts in words only. The poetry of truth is nothing to those whose business is only a trade, and knowledge is valued only as a salable commodity by those whose souls live in the market. They bind us with fetters of error and falsehood, and deceive us by the siren's pleasing songs, and soothe us into dreaming slumber, from which we shall awake only to find ourselve disappointed. Although there can be no doubt that during the past decade medical science has made rapid and giant stride towards the alleviation of human suffering, and the prevention of disease, it must also be admitted that medical scientists have held forth promises which have not been fulfilled, and kindled hopes, doomed soon afterwards to be quenched. Who does not recollect the ecstacy experienced by thousands of consumptives when the declaration was heralded far and wide a few years ago that the cure of the most dreaded disease of humanity—consumption—had at last been found. The memory of that vast pilgrimage of poor creatures flocking from the uttermost ends of the earth to the German discoverer. Oh! the bitter disappointment. It was enough to touch and wring the heart of the hardest, that changed hope into dispair. These different panaceas, as numberless almost as the sands, planted by their discoverer and watered by their advocates, appear regularly as the seasons, blossom forth as luxuriantly as the tea rose, and die as quickly as the morning glory. They are here to-day, gone to-morrow. This morning they are regarded as reverently as heroes going forth to battle for mankind. This evening they are shorn of their honors, despised and trampled upon by their advocates of the morning.

The years flee! The complexities of the Twentieth Century methods obscure or entirely obliterate the names of the forefathers in medicine, but before the student of the past there arises an army of self- sarificing men whose eyes opened on the morning light of undreamed blessings for the human race. It is hard to estimate the debt that we owe to those whose feet made smooth the rough path of science and whose beneficient unselfishness set so splendid an example before their successors of to-day.

We do not possess the key that unlocks and reveals all secrets in the "Book of Life," but we can carry the sunshine of hope and comfort to the bedside of the suffering, smooth many of the wrinkles of care and lessen sorrow.

There are two hours in life's history in which the physician is appealed to as one bearing a sacred mission: the hour of travail and that of death. In the agonizing wail anticipating motherhood we recognize the voice which gave to the world and humanity that priceless treasure, a mother's love. It is in this hour that the physician may have the responsibility of holding two lives in his hand, one bearing the fruits of maternity and love, the other cast helpless upon the ocean of life, as a jewelled petal blown from the rosary of God. The day will come when medical science and skill will have reached that apex of perfection that it will be able

to remove all the diseases of man and leave not for life a single outlet, a single door of retreat, except old age. There is something touching and in the giving health and life to men. The camp, the battlefield and the intrigues of state have ever charmed the poet and historian; but in the long and silent watches of the night, by the bedside of the dying, with all its stifled griefs, or when life trembles in the hand of the physician, alike in the poverty-stricken hovel, or in the palace of the rich, are wrought deeds of heroism, unsung, inspired by the genius of Aesculapius, whose sons are forever crowding together to the temple, bringing their gifts to the altar.

Infection.

By I. W. Faison, M. D., Prof. Medicine and Pediatrics, North Carolina Medical College, Dean of the Faculty, visiting Physician Presbyterian Hospital, Charlotte, N. C.

I am here to-day to discuss with you one of the most important subjects that interest the medical men of our time. The subject that I have selected is "Infection," as it relates to infectious diseases. While it covers a very broad sweep, I shall endeavor to condense it within the scope of a short paper, that it may meet the desires of this society and your good pleasure. The best minds of the most learned and painstaking medical men of the world are daily delving and nightly working to solve the mysteries that are confronting us. Almost daily some honest investigator proclaims some new theory that may or may not be true. The changes are wrung frequently, and that which may seem a positive fact to-day vanishes as readily on to-morrow. If you try to keep pace with the risings and fallings of these assertions, as they appear, and you are not well grounded in your medical faith, you will become skeptical. Be faithful to the end, for these rapid evolutions will bring, in the end, only good to our store of medical knowledge. The germ theory to-day is a fixed fact, and through this theory comes our knowledge of infection, and the relations between the two in the production of the many diseases that infest the human system. With this fact or theory well established as a fixed principal in our medical knowledge, we necessarily must reach out and seek for each specific cause of the different diseases and the sources or channels through and by which these infections enter the body. So far as I am able to learn up to the present time there are many specific pathogenic germs, producing similar pathogical tissue changes in the body whenever these germs enter the body and find a nidus suitable for them to reproduce themselves; and that there are five well established channels through and by which these specific causes enter the body, namely:

1st. By contagion; 2nd, the communicable; 3rd, the non-communicable; 4th, by abrasion; 5th, by intermediary hosts.

I will discuss these different channels separately, as briefly and intelligently as I can, although I will try to be elaborate enough to clearly convey what I mean.

First, by contagion: I desire to lay down the fundamental proposition that all contagious diseases are infectious, but that all infectious diseases are not contagious. There is a distinct and wonderful difference in the meaning

Delivered at the Raleigh meeting of the Medical Society of North Carolina, May 23-26, 1901.

and usage of these words, infection and contagion, when used by intelligent and scientific pathologists and bacteriologists. The great majority of all the diseases that the human race is heir to are infectious, while on the other hand, very few, say five or six, belong to the group of contagious diseases. That you may more fully catch the idea that I am trying to inculcate, I will mention a few of the diseases which represent a perfect type of this group of diseases; namely, variola, rubeola and scarlatina. To-day the specific germs or protoza that cause these diseases that I have just mentioned are not isolated. Still we know they are some form of protozoa, belonging to a low order of animal life, but which, are still beyond the skill and knowledge of the bacteriologists and pathologists to isolate and name. We also know that they enter the body through the channel of contagion. By this, I mean that these protozoa can and do escape from the person effected and pass directly through the air to and into the body in close proximity, that is not immune, in spite of every known means by the most absolute asepsis that can be employed. In other words, complete isolation is the only way that we can prevent non-immune persons from contracting contagious diseases. The second channel is the communicable. Such diseases as typhoid fever, tuberculosis and diphtheria are splendid types of the diseases that compose this group. The specific pathological bacilli that cause these diseases are absolutely isolated and named. I refer to the typhoid, the tubercle and the Klebs-Loefler diphtheria bacilli. It took years and years to establish these facts, but to-day it seems to all that it has been at last correctly settled. The interesting part of it to us is how do they get into the body. We no longer consider as tangible the idea of contagion. They are not contagious and do not pass into the body by that channel, but it is now an accepted fact that they are communicable and that by this way they are carried from one person to another. By the communicable channel, I mean that the bacilli are thrown off in the excreta or sputa, and by means of water, the hands, a toy, or in the dust, the bacilli are communicated to some other person and the disease in kind produced.

The third is the non-communicable. The diseases of this group are neither contagious nor communicable, and just how they are transmitted I do not know —we do know that they are not contagious nor communicable. Non-immune persons, in the same room with persons sick with this class of diseases do not contract them. Acute articular rheumatism and purpura are types of this group.

For my purpose to-day, I will only mention acute articular rheumatism: To me, this is one of the most interesting. Earnest and careful investigations are being made concerning acute articular rheumatism just now. The consensus of opinion is, that it is due to some specific micro-organism. The war is waging to settle the specific cause. Anders says the weight of authority is in favor of a diplococcus as its principal cause. F. Meyer insists that it is a peculiar infection due to a streptococcus. Tiboulet, Wasserman, Paine and Ryffel in their various investigations found a tiny micro-organism frequently present in their cases, which they were not able to distinguish from other forms of streptococcus. Walker and Ryffel later have called this organism micrococcus rheumaticus. We must, in patience wait for further investigations and hope that it will be

settled correctly. Upon this settlement depends the fixed position as to its curability and its chronicity. I am of the suspicious opinion that when this is done literature of chronic rheumatism will have to be re-written, or, perhaps, left out of our text-books.

The fourth, by abrasion: The diseases that represent this type are septicæmia, pyæmia and puerperal fever. It is important to fully realize and estiate the dangers of this channel that we may be wise and cautious enough to prevent the ingress of the specific germs that produce these diseases in the body. The old adage "that cleanliness is next to Godliness" holds good here.

The fifth, by intermediary hosts: The type of the diseases that are transmitted in this way are, yellow fever, dengue and malarial fever. The hosts are rat-fleas, flies, house and tsetse, ticks and mosquitoes. I will mention only the malarial fevers. For the past few years this subject has been in the crucible of investigation. The dawn is beginning to break and I feel that in a very short period the pathologists and bacteriologists will positively enunciate to the medical world the absolute and fixed facts concerning this important matter.

Within the past few years great changes have been made in our medical positions. The old idea of telluric influences producing malaria has been set aside. No longer is it claimed that heat, moisture, soil and vegetable matter have to do with the production of the causes of malaria fever. No longer is the position of miasma, swamp air and the like, as causes, considered tenable. Dr. Grassi, of Rome, says there is no such thing as malaria. The word plasmodia no longer conveys the same meaning to us that it did just a few short years ago; in fact, Dr. Welch suggests that hæmamœbæ would be a decidedly more correct name. With these facts before you, you can and do readily realize how rapid and complete are the changes that are taking place. Then what and where and how do the causes of so-called malarial fevers generate and become transmitted to the human race? Gen. Ross, U. S. Army, in his investigations in 1897, in Africa, discovered and proved beyond controversy the fact that the mosquito was the channel through which the causes entered the human body. It is to-day an established fact, accepted by the latest and best investigators that this is the only channel through which this special cause of disease enters the body. Further investigations have proven that of all the mosquito families only four can transmit this cause, and of these four only, the female, portion of the tribe, can transmit it, as it is only the females that bite. This branch of the mosquito family is known as the anapholes. The cause of malaria, call it plasmodia or hæmomœbia as you like, is reproduced in the stomach of these mosquitoes, carried there in the blood sucked from the person infected; it rapidly reproduces itself, passes out through the lining membranes of her stomach and makes its way into the salivary glands and into the proboscis of the mosquito. When she bites, she sticks her proboscis through the skin and this poison is thrown out under this membrane. These hæmomœbæ make their way into the red corpuscles of the blood. These causes are of three distinct types, producing tertian, quortan or æstiva-autumnal fevers, according to the type to which they belong. The clinician has been in the lead for sometime in regard to malaria fevers, and long ago established the fact that qui-

nine is a specific in their treatment. To-day it stands absolutely true. With these scientific facts before us, our duty as to preventive measures is plainly marked out for us. Remove all cesspools; if not possible to do this have the pools covered with petroleum oil once a month; close and fill all unused wells; screen completely every opening in the houses in which people live, or use mosquito netting over every bed occupied by a human being; go indoors at night fall. It is best to sleep in the 2nd story as it has been well established that mosquitoes go about but little during the day time; they do not fly high from the ground, and a very important fact is they wander but a short distance from the place where they are brought into existance.

Quinine

By Dr. James M Parrott, Kinston, N. C.

From long and rather close observation, I am persuaded that the physiological action of quinine is but little understood by the average practitioner. It is not possible to witness the universal and indiscriminate use of quinine for all kinds of diseases, and at the same time believe for a moment that its effects on the system is understood in more than a meagre sort of way. I am sure all present have seen it given for almost every imaginable disease. In a general way it acts as all the bitter tonics. In small doses it promotes the flow of saliva and stimulates digestion. It adds force to the heart-beats and stimulates the vasoconstrictor nerves in small doses. In large doses it is a directdepressant.

Quinine checks diapodesis by paralyzing the leucocytes, while it seems not to have any effect on, or, if any, to stimulate the lucocytes which are out of the blood vessels. This fact, (which is hardly of practical value) along with the idea that moderate doses lower temperature, soon led to its use in pneumonia, coryza, etc. In my opinion, no conclusion is more erroneous. While it may, in moderate doses (and in pneumonia particularly, no one would think for a moment of giving it in very large, and consequently depressant doses) really does do these things in a limited way, yet in these diseases its disadvantages decidedly outweigh its advantages. We all know leucocytosu plays a very important role in the recovery of pneumonia patients. Quinine diminishes these. It also, when given in moderate doses, renders oxygenation, which is essential to cure much less easy, while it checks metabolism by interfering with protoplasmic oxydation. The reduction of visible leucocytes to one-fourth, as Bruce says it will do, along with its effect on tissue change through diminution of oxygenation should condemn it absolutely in every case of pneumonia, except, perhaps, in the earliest stages of the attack. Even then its efficacy is doubtful. The administration of quinine is often followed by decided improvement in this disease, and the attending physician very naturally attributes it to his favorite drug. Careful observation would show that nothing could be more erroneous in most instances.

I am convinced that many, many times quinine is given in simple epheral fever on the supposition that the attack is a malarial one. A great many physicians, indeed, I expect that at

Delivered at the Raleigh meeting of the Medical Society of North Carolina, May 23-26, 1904

times all of us have reasoned that since a given fever disappeared a few days after quinine is given that hence it was malaria. When this statement is made in the absence of the patient we all smile, yet we are all more or less guilty. We form a habit of diagnosing every fever case as malaria until it proves itself otherwise. These observations are confirmed by the following case which occurred in my own practice sometime ago:

I was called to see little H., age 4, one morning about 9 a. m. His mother stated that he had a chill that morning, accompanied by nausea and vomiting, and followed by fever. When seen, he presented a furred, coated tongue, and temperature 105. I prescribed a purgative and quinine. The next day he was in his usual good health. Just seven days after I was called again. He presented same symptoms as before. I prescribed as before, with good results. Seven days thereafter I was called again to same patient suffering as before, in spite of quinine given the day and night previous. The mother incidentally remarked that the chill occurred about 3 or 4 o'clock a. m. I have never believed that malarial chills develop at night, except in rare, extraordinary cases. I immediately examined blood, no malarial organisms or pigment granules were found. Purgatives were administered but no quinine given. Repeated blood examinations during the day showed no evidence of malaria. Large copius stools showed peanuts, orange pulp, apple seed and peeling, etc. Diagnosis then easy: from a close inquiry, I developed the fact that his father, who was at home only once a week, gave him freely of these every Sunday. This error in diet was dicontinued, the patient has never had a return of "chills." My early diagnosis of malaria was erroneous; the prompt results obtained were due

Another very interesting case came under my observation sometime ago, which illustrates the idea under discussion, but in a somewhat different light. I was called by a colleague to see Mrs. S., in consultation. She gave a history of chills, fever and sweats. After a casual examination, I must confess the case looked very much like malaria. However, I knew the family physician was up to date and an able man, and I hesitated in making a diagnosis without the aid of the microscope. A careful blood examination was negative as to malaria, also as to typhoid fever. A systematic examination of the patient, however, showed an abscess which had begun very slowly after labor, in left broad ligament and had burrowed upward in front of the psoas muscle, and was opened in the lumbar region, extraperitomally, of course, and the patient made an uneventful recovery. This case was also interesting because no symptoms were noticed by patient until full two weeks after confinement.

When one treats every fever as malaria until it proves itself otherwise, one uses the therapeutic action of quinine diagnostically. The writer called the attention of the profession to this, as a course which should be condemned several years ago. It is not only unscientific and unsatisfactory, but it is capable of great damage also. Simple ephemeral fevers, especially those of the old so-called "gastric" type, are unquestionably aggravated by quinine, and the preponderance of medical evidence is against its use in typhoid fever, as tending ultimately to increase the danger of hemorrhage, also to disturb the stomach, and to aggravate or pro-

duce very disagreeable nervous symptoms.

From every point of view its indiscrimnate use of fevers is to be severely condemned. A diagnosis of any fever can be made quicker, and much more certain and satisfactory by the use of the microscope, and a careful study of the case as it presents itself, than by the use of quinine. In fact, it can be stated as an undisputed fact that a diagnosis cannot be made with a degree of certainty by its use alone.

A case came under my notice sometime ago which very nicely illustrates the point in question. The patient, a young man, when seen by his family physician, was told that he had malaria, and quinine was prescribed. The fever persisted, and after ten days of two weeks, the doctor decided that in spite of all his hard work, "it (the fever) had run into typhoid." I saw him at the beginning of the third month. After a careful examination of the lungs, a diagnosis of tuberculosis was made. This was confirmed by my microscopic examination of sputum. He died of tuberculosis. Widal reaction negative in this case. In this case quinine diagnosis was worse than useless.

There are three ways by which typhoid fever can be diagnosed, and those are: First, clinically (symptoms, physical examination of patient, etc.); second, chemically (Diazo-reaction, which in my hands has most often been a failure, and is not to be depended upon in my opinion); thirdly, microscopically (Widal reaction, etc.), which is very reliable. Thus you see quinine is not one of them.

Of course, quinine is more generally and often used for the treatment of malaria in its various manifestations than for any other purpose. Since a 1-20,000 blood solution has been demonstated to be a sufficient antidote for malaria, the question very naturally arises, why are comparatively large doses so often and so generally given? A close chemical as well as theoretical study of the question will easily and quickly only unnecessary, but are positively dangerous. Some years ago Koch attempted to prove that malarial hemoglobinuria was nothing less than quinine poison. Personally, I have no patience with this view, yet I am sure, under certain conditions, which I discussed at length in a paper on Malarial Hœmoglobinuria, which was prepared for this society sometime since, and will not discuss it now, this may be apparently produced, or rather brought out, by very large doses. This, however, would be impossible when the liver and kidneys function properly. Without question there is a quinine hematuria, but I cannot conceive, from a practical standpoint, based on a physiological action of the drug, how it can produce a true hemaglobinuria.

How does quinine act as regards the malarial organism, and has it any effect on the toxic substances of this parasite of it produces such a substance?

The answer to the first section of the query—it was formerly considered that quinine acted as a simple antiseptic germacide, that is, by its direct action on the the organism. This conclusion was evidently reached by no particular reason. At F. A., King has advanced the idea that its action in the blood is due to its flourescence. Its blood solution transmits only violet rays, and it is through these that its specific effect is obtained. This probably explains why quinine has no effect on the crescent malarial organisms, these being chiefly found in the darkest recesses of the body (spleen, liver, bone-marrow,

etc.), where its flourescent properties has no effect. That sunlight, or a light that approaches it most closely from spectroscopic standpoint, is essential to the development of the malarial organism is an established fact; hence malarial chills are very seldom almost never developed at night unless the patient be exposed a great deal to very strong arc light. Acting on this flourescence theory, I have been using methylene blue with my quinine for sometime, and I must say that I think I have gotton some good results from this combination.

In answer to the second section of my query, that as to the effect of quinine on the toxic substance formed by malarial organisms, I will ask is there produced such a toxic substance? While this question has not been positively determined, the preponderance of medical authority is certainly on the side of those who claim there is. Sometime ago Querollo demonstrated that the perspiration from patients suffering from malaria would produce genuine paroxism; and hence concluded that toxic substance was present and in the perspiration. This may not be a rational conclusion. Ross has demonstated that hundreds of malarial filaments can can collect in the salivary glands of the mosquito, and it is possible (though not not demonstrated nor even suggested as yet) that these filaments could be in the perspiration. Such high authtorities as Roque and Lemoine tell us that large quantities of these toxic products are formed and are found in the blood, and they hold further that quinine acts on these products, assisting in their elimination through the kidneys; just how, they do not say.

Golgi has thoroughly demonstrated the fact that quinine destroys the organism at all stages of its development. Marchiafava and Biguomi believe that the intracorpuscular parasites are incapable of further development after giving quinine. This observation is interesting, and is of some importance in determining just when quinine should be given. All who are familiar with the growth of the organism, and who have watched it after the administration of quinine know tha teven a single moderate dose will terminate the growth of a group, if given just before its manifestation. Loveran, Golgi, Moneberg and others have shown that quinine acts more efficiently when given when the parasites are young and free in the blood. These observations lead us to conclude that it is probably best to administer quinine in several doses just before a paroxism.

While it is not my purpose to discuss the proper dosage, and the manner in which it is to be given, yet it is interesting and valuable to note that most all authorities agree that 6 grains in 24 hours is a sufficient amount after it has been given one week in full doses for æstivo-autumnal malaria.

It is very questionable whether quinine is to be used with benefit as a prophylactic for malaria. Such a high authority as Celli has spoken strongly against it. It is certainly safer and more scientific to destroy its carrier, the mosquito, or else to protect ones-self against its bite.

In conclusion, permit me to say that I do not think that quinine is very indicated except for malarial infections, that sometimes even then it is probably best not to give it—notable in the asthenic type or variety of malarial hemoglobinuria; that its indiscriminate use is harmful, and that as malaria has gotten to be the diagnostic scape-goat, so quinine has become the therapeutic scape-goat of medicine.

A Case of Sub-Normal Temperature Following Malarial Fever.

By J. D. Roberts, M D., Mt. Olive, N. C.

This is a case reported rather for the rarity of the points observed and with a hope of having some light thrown upon the manifestations shown, than for anything new or original, except, perhaps, in the grouping of the symptoms.

Leroy W. is 5 years old, rather under size and strength, but has always been fairly healthy, except a dispositinn to take cold easily. Father is healthy and of good physique; mother is of nervous temperament, more intensified in its manifestations since the birth of the patient, the only child brought to term.

I saw him first on the 10th of this month, and secured the following history: Parents live in a neighboring town, and three weeks since child had what his attending physician diagnosed as catarrhal fever, lasting twelve days. Came to Mt. Olive on a visit three days after being relieved of fever; some rise of temperature was noted on the 6th inst., just eight days since last fever, and a physician called on the 7th. I was asked to see him in the absence of the attending physician on the 10th. He had on the 8th and 9th calomel in broken doses, and quinia, also a liquid marked fever mixture, which reduced the temperature very effectually, but left the patient much depressed.

Present condition, 9 a. m. on the 10th inst., tongue covered with a very heavy white coating, rather flabby, eyes conjested, sallow complexion, foul breath, bowels open from calomel of the day before, liver slightly congested, temperature 102 degrees F., pulse 110; other examination negative. Had very high fever yesterday subsiding with perspiration during the night.

My diagnosis was malarial fever; treatment was mercury, podophilin, leptandrin, to be followed by quinia when temperture subsides to 100 degrees, or lower; sponging if temperature goes to 103 degrees. Temperature rose to 104 by 4 o'clock p. m.; reduced readily, with sponging, and to normal by 3 o'clock a. m. of the 11th inst. By an oversight or misunderstanding, only 4 grains of quinia were given, and temperature commenced to go up at 8 a. m., and at 10 o'clock was 101 degrees and rose to 103 during the afternoon. Between 3 and 8 o'clock on the 12th inst. patient had 12 grains quinine, and at 10 a. m. temperature was 98 1-5 degrees. Left mixture of Pepsin and hydrochloric acid. At 12 o'clock midnight, I was called and found a temperature of 95 degrees, pulse 140 and very feeble, extremities cold, face drawn, and patient disposed to be drowsy. Active treatment with whiskey, digitalis, nitro-glycerine and strychnia brought about reaction in circulation at once and the pulse was 95 full and regular in an hour. Temperature commenced to go up at 2 a. m., and gradually rose until 8 a. m.,, when it was normal.

Treatment, ol-terbinth, hydrochloric acid and pepsin, and heart pill of strychnia-nitroglycerin, strophanthis and digitalis, as indicated by pulse.

The first observation after this was at 10 p. m., when temperature registered 95 4-5, and at 11 p. m. temperature was 95 1-5 degrees, commencing to rise between 1 and 2 o'clock next morning, reaching normal by 8 or 8:30 a. m.

This has been the case from then until my leaving home, on the 22nd,

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with only slight variation. Some where between 8 and 12 o'clock the temperature will begin to fall, generally reaching its lowest limit by 11 p. m., remaining stationary from one to three hours, then going up to normal at 8 a. m., or earlier—once as early as 5 o'clock a. m. It has followed the periodicity of malarial fever, and the change in the temperature from normal was similar except the fall was not as rapid as is the rise of temperature in the pyrexice of malaria, and the rise to normal is more rapid than is the reduction in typical fever of malaria. The temperature has not gone lower than 95—generally after the first two days 95 3-5 to 96 2-6. It has gone above normal once, on the 19th inst., at 9 o'clock a. m. it registered 99 1-5 degrees, but commenced to fall immediately afterwards.

Treatment has had no appreciable effect upon the change in the temperature. Strichnia is required to keep the heart's action steady, which it does in small doses, the pulse rarely going over 90—and generally strong and regular. Atropine was given two nights for cold sweats. Bowels for the first six days were slightly loose, two or three bilious discharges a day. Purgatives have been given once or twice recently. The tongue has never been entirely clean. The digestion is rather weak, and care is required in his diet.

Since the 14th there has been a steady improvement in the boy's strength, flesh and personal appearance. During the day he is active, bright and cheerful. While the temperature is down he is very sluggish. His appetite is better than his digestion.

Quinine was given freely for three or four days with no effect. Muriatic and nitronuriatic acids, calasaya and iron, arsenic, digitalis, strichnia, nuxvomica, etc., have been tried alone and in various combinations, so far as I am able to see none of these are of any utility, except the strichnia keeps the heart's action below 95 regardless of the temperature.

No blood examination has been made to confirm my diagnosis of a malarial origin of this trouble.

Subnormal temperature of varying degrees and from various causes is not uncommon. A quarter of a century ago it was considered to indicate collapse, and even now we had rather not see it in our patients. Da Costa says it may fall to 89 degrees in cholera; Osler, in case of alcoholic intoxication, reports a fall of 75 in one patient; it falls in the beginning of peritonitis; it is common during profound shock, and after severe loss of blood; it usually accompanies alcoholic intoxication and long continued exposure to cold; it is found occasionally after fevers ending by crisis; sometimes seen in cholera infantum and cholera morbus; sunstroke, hysteria, tubercular meningitis and confusional insanity have all presented cases of it; poisons, especially by carbolic acid gives examples of it, the latter recording one case of 93.9 degrees.

Osler says that in the algid or adynamic form of malaria the temperature may be normal or subnormal, and gives history of one patient treated at Johns Hopkins Hospital with a temperature of 95 to 98 degrees.

Holt in his diseases of children says it is common in wasting diseases to find subnormal temperature, and premature infants may register 95 or 96 degrees and one recovery is recorded with a temperature as low as as 93.

So far as I have been able to find references to subnormal temperature, it has been with a sudden decrease and a gradual and usually slow return to

normal. I find no references to such a condition as is presented in my patient, and while he is apparently doing well, I prefer bringing about a change in this conditions. I cannot say I have a theory for the condition presented. We know that the production of heat in the body and the physiology of heat regulation, are subjects yet not satisfactorily solved. It is probably (Hand Book Med. Sci., article Caloriometry) that the vaso motor regulations in the medulla oblangata control in some unknown way the relattion of heat loss to heat production. A stoppage of heat loss produces a rise in temperature, and it should follow that a lessened production of heat in the body without a corresponding decrease in the loss brings about a fall in the temperature.

NOTE.—When the promise was given the chairman of this section to report this case I thought I would be able to make a complete report of the case, but it is still under observation, and I brought notes with me and have written this paper since coming to the meeting of the Society, and it is not exactly in the form I would like to present it, but haven't time for a finished production. J. D. R.

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Corns.—A ring of glycerine jelly is painted around the corn to form a raised rampart. A piece of salicylic acid plaster mull is cut to the size and shape of the ring and placed upon the corn. The whole is painted with glycerin jelly and wrapped in cotton wool.—*Unna.*

Ununited Fractures

By Stuart McGuire, M. D., Surgeon in charge St Luke's Hospital, Richmond, Va.

A generation or two ago writers of popular literature alluded to doctors as "bone setters." To-day they are referred to as pathologists, neurologists or gynecologists. A generation ago the leading surgeons of the country were famous for their ability to set a fracture —today they are better known for their ability to set a fee.

The enormous increase in medical knowledge, the limitation of study to special lines, the fascination of modern aseptic and antiseptic surgery, the striving after the new and original to the neglect of the old and established, have led me to the sad but inevitable condiscussed on the mosquito theory of maday is not as competent to treat an ordinary fracture as were his forefathers.

In our medical schools enthusiastic professors teach microscopic technique, serum therapy and the indications for opening the abdomen in obscure diseases, and the student is either referred to his text-book, or turned over to an assistant, for instruction in the diagnosis and treatment of fracture. In our medical society papers are read and discussed on the mosquito theory of malarial infection, the methods of catheterizing the ureters, and the choice between the perineal and suprapubic routes in prostatectomy, to the exclusion of any but a rare reference to the many important points concerning the reduction and immobilization of a fracture.

I plead guilty as a teacher and writer to having done my part in bringing about this condition of affairs. In fact the recognition of my own deficient knowledge of "bone setting" has made

Paper read at the meeting of the North Carolina State Medical Association, held at Raleigh, N C., May 23-25, 1904.

me determine to give the subject closer study, and has led me to make this plea for the better education of students and the more thoughtful attention of practitioners to what, if I am not unduly pessimistic, threatens to become one of the lost arts.

Babies are born and bones are broken in every community, and while specialists in large cities may formulate and teach the principles for the management of such cases, it is to the general practitioner that the public still looks for deliverance in labor and first aid to the injured.

If lack of study and hence lack of skill shall lead to poor results at the hands of the local attendant, the laity will soon learn to transport fracture cases to the cities, and the country doctor will be responsible for the creation of an additional specialist to the number which already encroaches upon his practice.

With few exceptions a broken bone properly set and splinted will heal, and the increasing number of cases of ununited fracture that come to a surgeon doing referred practice is a clear index of the lack of knowledge possessed by the average doctor with regard to fracture.

I claim no personal exemption from my own condemnation for I am free to confess that I respond to every call to set a broken bone with reluctance, and leave the case with misgivings, and I know, from the confidence with which I undertake other work of greater responsibility, that my timidity comes from ignorance.

Public criticism is frequently withheld when a surgical blunder is committed in the abdomen, but it is sharp and relentless when it is apparent in an extremity. A man who dies after an operation is buried and soon forgotten, but the man who has a deformed arm or shortened leg from a badly treated fracture, lives for a generation a walking or limping advertisement to his community of surgical limitation or incapacity. Let us, therefore, study fractures more in order that we may treat them better; if not for the sake of our patients then for the sake of our profession.

But little has been learned and much has been forgotten in regard to the immediate treatment of simple fractures since the publication of the classical work of Malgaigne more than fifty years ago, and as this and other books are accessible to the profession, I will limit my paper to a brief review of what has been accomplished, and what remains to be done, in the treatment of a special class of cases commonly called ununited fractures.

When a bone fails to unite after being immobilized for a certain length of time the condition is spoken of as either delayed-union or non-union.

Delayed-Union is where reparative action is present but owing to lack of nutritive vigor, callus is either tardy in development or imperfect in its transformation. Improvement of the general health, the establishment of a more perfect local circulation, or the irritation of the seat of injury by forcibly rubbing the fragments together may stimulate the halting provess and finally result in solid union.

Non-Union is where reparative action is absent, from local or constitutional causes, and the result is either a ligamentous union or the formation of a false joint. The ends of the bones round off, the medullary cavities become closed and the blood supply to the part is diminished. There is always abnormal mobility, often displacement of the fragments and sometimes absorp-

tion of the bone.

The division of ununited fractures into delayed union or non-union is based on the fact that cases in the first class can be cured without an operation, by making more active the reparative forces already in existence by means of constitutional and local treatment, while cases in the second class cannot be cured except by an operation which freshens the rounded ends of the bones,



Case 1. Ununited fracture of humerus one year after operation. Silver suture indicates line of union.

opens up their medullary cavities and changes the existing passivity to the activity of a recent fracture. Unfortunately this prognostic distinction cannot always be made clinically, and usually the surgeon when called to treat a case of ununited fracture, deals with it at first by non-operative measures with the hope that union may simply be delayed, and should his efforts prove unsuccessful, he operates on it later under the conviction that it is a case of non-union not amenable to less heroic measures.

As delayed-union and non-union cannot be differentiated except by the ultimate result in the individual case, it is not only practical but proper to discuss them jointly. Here, as elsewhere, it is necessary to consider the causes which, singly or combined, result in the condition, for by their early anticipation and prevention, or later by their recognition and correction much time and suffering may be spared the patient.

The causes of delayed-union, or non-union of a fracture are usually classified under the heads of general and local. Under the first, authorities give a long list of constitutional conditions or diseases, such as age, pregnancy, lactation, acute infectious diseases, starva-

tion, loss of blood, rickets, marasmus and syphilis. All except the last are of doubtful influence, for it is a strange but authenticated fact that failure of a fracture to undergo proper ossification is more apt to be observed in a vigorous adult than in the debilitated, the marasmic or the aged. While it is true that syphilis and fractures are both so common that they must often co-exist without detrimental influence one on the other, still in my personal observation patients with delayed-union have responded so often and so promptly to anti-syphilic treatment that it is now my practice to prescribe iodide of potash in such cases as the first effort to secure union, and this whether any history of specific infection can be obtained or not. If it does no good it does no harm, and, as we all know, syphilis, like accidents, is likely to occur in the best regulated families, and patients suffering with the disease are sometimes ignorant of their condition or untrustworthy in their statements.

Under the local causes of delayed-union or non-union may be mentioned. 1 Marked displacement or wide separation of the fragments. 2. Interposition of muscle, facia or foreign bodies between the fragments. 3. Defective nutrition through faulty innervation or deficient bloody supply. 4. Infection and suppuration, destroying or preventing the formation of callus. 5. Defective immobilization or premature passive motion. In fact any defect in the primary treatment of a fracture, such as failure to effect accurate reduc-



Case 2. Ununited fracture patella 3 months after operation.

tion, or to secure proper immobilization. Too tight bandaging, undue pressure of splints, frequent removal of the dressings for the purpose of inspection and finally permitting the patient to use the limb too soon on account of the unfounded fear that prolonged fixation deficient blood supply. 4. Infection joint.

When a sugeon takes charge of a case of ununited fracture his first attention should be directed to the general health of the patient. An examination of the urine should be made; errors of digestion should be detected and corrected; anemia and debility should be combatted, and the system gotten in the best possible condition. If the case is not over a year's standing iodide of potash should be administered unless the drug has already been tried without result.

The local treatment should be based largely on the result of an x-ray examination. In some cases it will appear probable that the patient can be cured without subjecting hm to an operation; in other cases it will at once be obvious that nothing short of bloody surgery will prove effective, and it will be a waste of time to try milder measures. The following is a brief summary of local methods that have been advised, each of which will prove of service in properly selected cases: 1. Light clastic constriction above and below the fracture producing more or less hyperemia. 2. Active use of the limb encased in an immobilizing dressing of plaster paris. 3. Percussion of the limb by the surgeon with a rubber mallet, or by instructing the patient to strike his heal on the floor if the fracture be in the lower extremity, or pound the hand or elbow on a table if it be in the upper. 4. Injection of from three to ten drops of a ten per cent. solution of chloride of zinc between the ends of the fragments by means of a hypodermic syringe. 5. Administration of an anesthetic and forcibly tearing loose fibrous adhesions, effecting accurate apposition and treating as a recent fracture. 6. Subcutaneous drilling of the ends of the fragments, the perforattions opening up medullary space and the small particles of bone detached acting as a stimulus to plastic repair. 7. Resection of the ends of the bones by an operation, the accurate adjustment of their freshened surfaces, and the maintenance of the fragments in the correct position by means of satures, nails, medullary splints or bone ferules, all reinforced, of course, by a rigid external dressing which immobilizes the two adjacent joints.

Time does not permit me to discuss several interesting points in the technique of this operation or to describe many ingenious methods that have been devised to make it one of the most successful and satisfactory in surgery. I therefore content myself with the exhibition of skiagraphs of three of my cases.

The first case was a gunshot fracture of the upper end of the humerus, attended by loss of one or two inches of the shaft of the bone. Suppuration prevented callus formation. The ends of the fragments were exposed, squared with a saw, and the revivified surfaces united with a silver wire suture. Subsequent immobilization was secured by rest in bed with sandbags on each side of the arm, and extension from the elbow by means of a modified Buck's apparatus. In the photograph the line of union can only be detected by the location of the silver wire suture.

The second case was that of a man who fractured his patella by muscular violence. He was treated by his physi-

cian and good union apparently resulted. He was allowed to get up too soon, however, and by a slight fall widely separated the fragments. Believing that the condition justified an operation I opened and washed out the joint, freshened the bony surfaces and sutured them together with chromicized catgut. The operation was done three months ago and the function of the joint is perfect.

The third case was a fracture of both ulna and radius just above the wrist. The man came to me six weeks after the accident and I found there was no union, owing to overlapping of the fragments from failure on the part of the attendant either to effect or maintain reduction. Muscular contraction was such that I was unable to correct the displacement, so I exposed the ends of the bones through a posterior incision, resected and drilled them and united them by catgut sutures. One photograph shows the arm immediately before the operation, the other shows it two weeks after, when the dressings were removed to inspect the wounds.



Case 3. Ununited fracture of forearm 2 weeks after resection and suture of bones.

The case is still in splints and it is too early to report final results.

Despite the success that has followed the treatment of ununited fractures since the introduction of aseptic and antiseptic surgery there still remains one fracture that up to this time gives as poor results as it did a century ago,

namely, fracture of the neck of the femur. For a time it was believed that failure to secure bony union was due to some unusual pathologic condition resulting in failure of callus to form in sufficient quantity to effect repair, but now it is known that the defect is due to failure of known mechanical methods to secure accurate approximation and to maintain adequate immobilization of the fragments.

The argument that in intra-capsular fracture of the femur the upper fragment has not sufficient blood supply to maintain vitality, much less to produce callus, is controverted by the following facts:

1. Completely detached fragments of bone at other localities, such as a disk removed by the trephine, take an active part in reparative action.

2. Post-mortem examinations in cases of introcapsular fracture show that the upper fragment not only maintains its vitality but in a majority of cases exhibits evidence of callus formation.

3. In cases of intra-capsular fracture where impaction has taken place, bony union will almost invariably result if the fragments are permitted to remain in apposition for a sufficient time.

4. In experimental cases of intra-capsular fracture produced on lower animals, bony union was the rule when the fragments were held in position by



Case 3. Ununited fracture of forearm 6 weeks after accident.

direct fixation with a nail or screw, while in the control cases not treated no union except of a ligamentous nature was ever observed.

Writers no longer lay stress in fractures of the hip on the division into intra-capsular and extra-capsular fractures, but strongly urge the importance of distinguishing between a non-impacted and an impacted fracture. An impacted fracture of the neck of the femur is considered the best setting of the bony fragments that a surgeon can obtain, and practitioners are urged not to try to elicit crepitus in doubtful cases, but to rely for diagnosis of the nature of the injury on the shortening and eversion of the limb, the change in posture of the trochanter major, and the loss of tension of the fascia lata between the trochanter and the crest of the ileum. Post says: "Better an imperfect diagnosis for the surgeon and a perfect limb for the patient than a perfect diagnosis for the surgeon and an imperfect limb for the patient."

Much more could be written, but I trust I have said enough to convince you that failure to secure bony union after intra-capsular fracture of the neck of the femur is not due to any peculiar lack of reparative power of the part, but to ignorance of efficient means to effect reduction and maintain apposition of the fragments. In other words, the bad results that follow the injury are not due to any fault of nature, but to absence of efficient methods of treatment.

Buck's extension apparatus in the original form, or modified by counter or lateral traction, rarely, if ever, secures a good result. Senn's method of manual reduction and fixation by the application of a plaster paris dressing, with a padded screw incorporated for making lateral pressure against the trochanter, is of doubtful value in the hands of the average practitioner. An open, or subcutaneous operation for the direct fixation of the fragments by suture, nails or screws is applicable to but few cases, as the injury usually occurs in the feeble and aged who are but poor subjects for surgery.

The problem of how to treat successfully cases of unimpacted fracture of the neck of the femur is a difficult one, and has not yet been solved. That it will finally be satisfactorily settled I do not doubt. Congenital dislocation of the hip is rare, and few men ever have an opportunity to diagnosticate a case. Senile fracture of the hip is common, and all of us are frequently called on to treat such cases. The deformity of youth is distressing,but the suffering and helplessness of old age are even more appealing to our sympathies. May this society have the honor of producing a man who some day will accomplish a work greater than that ever aspired to by the distinguished Lorentz.

Use of the Cystoscope.

By A J. Crowell, M. D., Professor of Skin, Genito-Urinary and Rectal Diseases in North Carolina Medical College.

In presenting this paper on the uses of the cystoscope, we claim no new discovery or therapeutic value in the use of the instrument, but wish to emphasize its value in diagnosing pathological conditions of the prostate bladder, ureters and kidneys. Prior to the invention of this instrument we were at a great disadvantage in arriving at a correct diagnosis of many of the diseased conditions of the genito-urinary tract. In experienced hands today it gives opportunity for examination and inspection

Delivered at the Medical Society of North Carolina, at its Raleigh meeting, May 23-26, 1904.

equal to that afforded the rectal specialist by the rectroscope, the laryngologist by the laryngoscope, or the gynaecologist by the speculum. The instrument was invented and first used by Dr. Max Nitzer, of Berlin, in the year ——, but has not been used extensively until within recent years.

The cystoscope, as you are aware, is an instrument for enabling the eye to observe directly or by reflected light the interior of the bladder wall. It is a tubular instrument from 7 to 11 inches long and varying in size from 18 to 24 French scale, and so constructed as to pass readily into the bladder. There are lenses in the tube to magnify the field of vision and mirrors are placed so as to make it possible to observe the prostratic area and the rest of the interior bladder wall. A small electric bulb is placed on the end of the instrument to furnish the necessary light which can be esaily removed and another bulb inserted in case it burns out. When required for use the electricity for lighting can be obtained from an ordinary incandescent light after regulating the current with a rheostate. The technique of the examination is simple. The instrument should be thoroughly cleansed with soap and water and sterilized by wiping with pure carbolic acid and then placed for ten or fifteen minutes in a strong carbolized solution and before inserting it should be rinsed with steril water. The patient is placed on a table with the head a little elevated, the thighs slightly flexed, and feet resting in chair beside the table or stirrups for this purpose. This position is comfortable to the patient and very convenient for the operator. Thoroughly cleanse the pubes and genitalia of the patient, irrigate the urethra with a 1:5000 solution of permanganate of potassium, insert a steril catheter and irrigate the bladder with a saturated solution of boric acid until the water returns clear. (Some of the cystoscopes are so made that the bladder can be irrigated after its insertion.) Then insert half an ounce of a 4 per cent. solution of cocaine through the catheter into the bladder and allow to remain for two minutes. Again irrigate and fill the bladder with steril water. After withdrawing the catheter fill the enterior urethra with the 4 per cent. cocaine solution, hold for a minute or two and the patient is ready for the insertion of the cystoscope. Always test the light before inserting the instrument by making connection with the electric current. The instrument is then lubricated with steril glycerine and passed into the bladder just as an ordinary sound, a procedure which is almost painless.

There are certain indications and contraindications for the use of this instrument which it would be well to stop here and enumerate. It is indicated in all chronic bladder and prostatic troubles as well as suspected kidney cases. The contrary indications are as a rule, acute conditions of the genito-urinary tract, such as specific urethritis, epididymitis, acute cystitis, pyelo-nephritis, prostatitis, and seminal vesiculitis. Some writers claim that hypertrophy of the prostate is a contraindication, but the cystoscope is indicated in every such case, and especially so if you are considering an operative procedure. On looking into the cystoscope, first inspect carefully the mucus membrane of the bladder wall,—note its general appearance, whether smooth and velvety, roughened, thrown into rugae,—the condition of the blood vessels, presence or absence of diverticulae, ulcerations, and if ulcerations are present observe location, whether tubercular, malignant,

inflammatory, traumatic, or simple catarrhal in appearance. In all cases of chronic cystitis, which is one of the most common conditions with which we have to deal, you invariably see dilated blood vessels with mucus membrane thickened and thrown in rugae. The cases of chronic cystitis are usually partial retention of urine due to hypertrophy of the prostate, stricture of the urethra, new growths, or foreign bodies, and can only be determined positively by the use of the cystoscope. There are of course, certain other conditions which will produce cystitis, such as obstruction to the visceral circulation, pressure and cases secondary to acute infections. It is evident that these troubles cannot be treated successfully without first finding out the specific cause. Where hemorrhage is not profuse, wounds, contusions, or rupture of the bladder wall can be readily recognized and the extent and severity of the injury determined. Fistulous openings can also be easily located.

Among the new growths, papillomata, polypi, fibroids, corcinomata not uncommonly occur in the bladder. Such growths cause very obscure and often troublesome bladder symptoms, the cause of which can only be determined by the use of the cystoscope. The location and character of the tumors is also found out, and the advisability of removal decided upon. Recently a young man 22 years old came under my care, suffering with partial retention of urine and cystitis. The cause of his trouble had not been diagnosed but the cystoscope at once revealed the presence of several papillomata at the urethral opening, one which acted as a valve to occlude the outflow of urine. After a suprapubic cystotomy and removal of the growth the symptoms of retention along with the cystitis disappeared. Foreign bodies in the bladder are often sufficient to produce pronounced symptoms, but yet not large enough to be detected by the stone searcher. In such cases the cystoscope will reveal their presence. Even in cases ic which a stone is sounded, we can by seeing its size determine the operation indicated. Two cases which I have recently operated upon illustrate the value of the instrument. In one the stone was seen to be too large to crush and was removed by suprapubic cystotomy, in the other the stone was not so large and was removed by litholapaxy. Both cases did well and the results equally satisfactory, but the suprapubic case remained in the hospital three weeks, the other case only a few days. In another case we could detect nothing with a stone searcher but the cystoscope readily revealed a small stone which was removed by litholapaxy. A subsequent cystoscopic examination showed the stone had ben entirely removed. Former failures of litholapaxy have been due to the want of following the operation by cystoscopic examination to determine if all the fragments have been removed from the bladder. We have seen other foreign bodies removed from the bladder such as hair pins, and slate pencils, introduced by masturbating females, recognized by the cystoscope which were not previously found by other means. The oblique light of the instrument is used for examining the prostate and is found very beneficial in determining the nature of hypertrophy of the gland. In many cases digital examination will detect but little hypertrophy, when a cystoscopic examination will reveal a perunculated middle lobe sufficient to produce marked retention. I have lately seen one case of such a character with complete retention. It

is always important to first inspect the site for the incision before doing a Bottini operation.

In diagnosing urethral and kidney trouble the cystoscope is of incalculable value. On inspection of the ureteral openings we note their appearance, as to size ,dilatation, secretion, inflammation, and whether or not one or both openings are involved. Inflammation or ulceration around one ureteral opening is strongly suggestive of tuberculosis of the corresponding kidney. Large and dilated ureters usually accompany chronic cystitis with retention. We next observe the secretion, whether or not they are simultaneous, clear or cloudy, the presence or absence of blood or pus, when only a small amount of blood or pus exudes it cannot be detected without the use of the microscope. A simultaneous secretion shows the presence of two functionating kidneys, but the functionating power of each can be determined only by catheterization and measurements of the amounts of the secretion. The discharge of blood or pus indicates some diseased condition on the side from which it comes, either in the ureter or the kidney.

Catheretrization of the ureters is indicated when we have an acid urine with pus, blood, albumen, tube cast without bladder symptoms and no pathological condition of the bladder as shown by cystoscopic examination, and it is especially indicated if there is inflammation or ulceration about one of the ureteral openings. (An acid urine is found in tuberculosis of the bladder but the cystoscope of the bladder will reveal this condition.) For catherizing the ureters we have two instruments—the direct and oblique; we use the direct. In the hands of a skilled operator the passage of the catheters is usually very easy. The difficulties encountered in catheterizing are diverticulae, and obstructions from stricture, impacted stone, and pressure from various causes. The benefits derived from this procedure is obtained chiefly from an examination of the secretions collected. The secretions from each catheter are carefully collected for several minutes and the amounts measured and compared. This gives us the relative activity of the two kidneys. In case no urine is passed from one kidney it means that the kidney is not functionating or else that there is an absence of the organ. It has been observed that a testicle is frequently absent along with the absence of a kidney. By estimating the freezing points of the two specimens we can determine whether or not the proper amount of nitrogen is eliminated by each kidney. There is a special apparatus devised for this purpose and is called a cyroscope. On careful examination of both specimens we invariably find albumen and tube casts, from both kidneys in chronic nephritis. Blood and pus indicate pyelo-nephritis or some inflammatory condition. This is a very important point to decide if an operation is anticipated. If pus comes from one kidney and the other is found to be normal then an operation is justifiable. If on the other hand, both kidneys are found diseased no surgical procedure should be thought of, and especially if the trouble is tubercular in origin. A bacteriological examination of the sediment will often reveal the cause of the trouble, whether tubercular, gonorrhoeal, or due to other micro-organisms, pyogenic in character.

We have briefly gone over the main uses of the cystoscope and the catheterizing outfit. To go into details would take up more than my alloted time for this paper, but we hope what has been

said will stimulate a more thorough investigation in this important branch of medicine.

Acute Ileo-Colitis.

By G. O. Kirby, M. D., Marion, N. C.

At this season of the year as well as later on in the summer months we sometimes have very severe cases of this disease, and in preparing a paper on this subject, I do so fully aware of the vast amount of literature giving causes and treatment (especially treatment).

Ileo-colitis may be secondary to any of the infectious diseases, particularly measles, diphtheria and broncho-pneumonia, but I will mention only primary cases in infants and children up to the fifth year as I have treated a greater number of cases between these ages.

Etiology.—By taking food in which poisonous products have been formed by bacteria, sudden reduction of temperature by exposure to cold or drafts, causing the blood to congest the bowels, by irritating substances such as unripe or stale vegetables, improperly prepared and undigestable food. Foreign bodies also enter, as in one of my cases, boy, age three, swallowed car seal with about one-half inch of the wire attached, which set up a violent form of entero-colitis. The most common form and the only one I will mention is the acute catarrhal.

General Symptoms.—Onset usually sudden, pain, fever, vomiting with frequent stools, which differ in character but are generally yellow with streaks of green and often containing undigested food, followed by mucous and then blood and mucous; at this stage there is very little odor. As the disease progresses in two or three days the stools become more jelly like and change color slightly, abdominal pain tenesmus and great thirst are now present and temperature lower than at onset. This usually lasts from five to eight days and then the stools contain gradually more fecal matter, and in the course of ten days more the patient has about recovered. It is now very important during this later stage of the disease to look carefully for ulcer action of the bowel, especially if there continues to be slight fever.

General Treatment:

(1) Pay strict attention to hygienic surroundings.

(2) Cleanse the bowel of the bacteria and their products and render the bowel as unfavorable as possible for their production.

(3) Lessen the irritated and inflamed condition of the bowel.

(4) Watch carefully the constitutional symptoms.

Cleanliness should be observed in child's person and clothing, a light flannel gown worn during the day is generally sufficient; fresh air is of the utmost importance, and the bath for the reduction of temperature if over 102 degrees.

First cleanse the stomach and intestinal tract by a purgative, and for this I use calomel in one tenth grain doses given every hour until five doses are taken, then every hour or two until one grain is given, followed by castor oil in teaspoonful doses every two hours until bowels move freely. As important as cleansing the bowel at the outset, is to give it absolutely nothing to do for twenty-four hours; withhold all food and give two or three tablespoonfuls of albumin water every two hours, and if there is much prostration, diluted brandy with plenty of water. Antiseptic mixtures are generally well

Delivered at the Medical Society of North Carolina, at the Raleigh meeting, May 23-26, 1904.

borne and do good. When irritability continues large doses, fifteen to forty grains of bismuth subnitrate every two or three hours. Opium to be given only when pain is severe or for too frequent stools; the danger of opium in stopping the peristaltic action of the bowels is well known, but it will be well for us to always keep it in mind.

Irrigation of the colon is at all times of benefit as it causes the bowel to move at once and removes offensive material.

CASE NO. 1.

An infant fourteen months old fed on a modified cow's milk, found temperature 102, vomiting frequently very sour smelling material, abdomen distended and relieved slightly by the passing of gas, diarrheal movements contained mucous, greenish color and later on attended by pain with streaks of blood and violent straining, developing acute ileo-colitis.

Discontinued all food, evacuated stomach and bowels, employed cold bath for the reduction of temperature, gave calomel in one-tenth grain doses until one grain was taken, followed by castor oil and high irrigation of the colon; this continued twenty-four hours, then commenced with peptonized milk two tablespoonfuls every hour or two followed by a mixture of bismuth subnitrate, Tilden's antiseptic, tincture opium, (deod) with maltopepsine; patient seemed to recover rapidly and was dismissed in about ten days. One week later was called again for a slight return of the same trouble, and going through with the first part of the above treatment I gave the following prescription and carefully regulated the diet with good results:

Bismith sub-nitrate, two drachms.
Com. Tr. Catehu, two drachms.
Tr. Opium (deod), 22 gtts.
Glycerine, two drachms.
Aromatic syrup Rheubarb, three drachms.
Cin. water ad. qs., two ounces.
Teaspoonful every two hours.

CASE NO. 2.

A child three and one-half years old, complained of a very severe pain in the bowels over region of the appendix. Temperature 101, tongue slightly furred, had vomited several times, could not straighten right leg, kept it well drawn up. One can readily imagine what my diagnosis was, especially as on examining the little fellow closely I found a decided enlargement where pain was located.

Parents would not consent to an operation.

Gave large dose of castor oil, followed by high enema, applied hot flannel cloths and poltices. Six hours after giving the oil it had several movements of the bowels which was very painful and the enlargement disappeared, with a great improvement in the symptoms; on the day following, began to develop acute inflammation of the bowels, a very slight enlargement again reappeared, discharges containing mucous and blood and very frequent with thirst and great pain, temperature 101 to 104 this continued for six or eight days, when one morning on giving an enema of warm olive oil I removed nine prune seed from the bowel.

CASE NO. 3.

Boy five years old, when first seen had a pronounced and well developed case of cholera morbus. Vomiting and frequent discharges. Small doses of

calomel at once administered to control vomiting followed by one-half grain doses and magnesium sulphate.

There was no further trouble at this time, until three days later, when I was again called. This attack was due to eating a large quantity of chestnuts; after clearing the bowels the diarrhea continued and in twenty-four hours contained blood and mucous and later on shreds of membrane, temperature became high, thirst excessive as was also the vomiting, crushed ice was given freely, and to check the vomiting a powder composed of the following was given every hour:

Bismut sub-nitrate, grs. 2.
Cerium oxalate, grs. 2.
Cocaine, grs. 1-16.

The cold bath was employed to reduce temperature with irrigation of the colon; to check the too frequent discharges large doses (forty grains) of bismuth sub-nitrate with salol was given. This acted nicely and after several hours commenced with albumin water and peptonized milk, followed by animal broths.

The child made a slow recovery and I had his mother bathe him with equal parts alcohol and cod liver oil, rubbed well in the skin twice a day, and prescribed syrup iodide of iron in increasing doses, which proved very satisfactory.

ABSTRACTS.

The Significance and Management of Paralysis of the Bowel. (International Journal of Surgery.)—Brown states that paralysis of the bowel may be caused by the shock of a blow upon the abdomen, injury to the nerves that supply the muscular coats of the bowel and by inflammation of the peritoneum The later cause is by far the most common, and before the days of general surgery this condition was so clearly recognized as nature's cure, as it allowed adhesion to be formed, that opium was given to further it. Oschuer's plan of washing out the stomach and bowels, and keeping them empty of all food and purgatives is by far the best medical treatment that has been devised for appendicitis.

He wishes to call attention to this plan of nature's, not before or instead of an operation, but after operating. He states that the fermentation of food left in the stomach gives rise to overdistention and that it is this complication of the paralysis and not the paralysis itself that is so difficult to treat. When the bowels move the patient, as a rule, gets rapidly better, but they move because he is already better. It is not the cure, but merely a symptom of improvement. Prolonged irrigation of the stomach before the patient leaves the table, the application of a broad and tight abdominal binder and opium are the sheet anchors. This, with plenty of water to drink, is his plan of treatment for post-operative cases.

Pulmonary Consumption and the Possibility of its Eradication Through the Combined Efforts of a Wise Government, Well-Trained Physicians and an Intelligent People. (Maryland Med. Jour.)—Knopf concludes his article before the tuberculosis exposition in Baltimore with the following sum-

mary on the duty of municipal, State and Federal governments:

Each community should have an efficient committee on tuberculosis, composed of a number of general practitioners, health officers and trained charity workers. This commission should have its offices in a building connected with a special dispensary for tuberculous patients, if the size of the community demands such a provision. Each case applying should be carefully examined for the following purposes:

1. To determine the applicant's condition by medical examination.

2. To visit his home if he has been found tuberculous, and to institute such hygienic measures as seem necessary (distribution of pocket spittoons, disinfectants, etc., gratuitously if the patient is poor).

3. To examine the other members of the family in order to find out if any of them have also contracted the disease, and if so, to counsel proper treatment.

4. To report in full to the sanitary authorities concerning the condition of the patient's dwelling. Its renovation or even destruction may be imperative when it is evident that tuberculosis has become "endemic" there, owing to the condition of the soil or other sanitary defects.

5. To determine the financial condition, whether the patient is or is not able to pay, and whether or not by his being taken to an institution the family will become destitute.

A Preliminary Report on a New Method of Treating Tinnitus Aurium. (Johns Hopkins Hospital Bulletin.)—Reik states that tinnitus is defined as a ringing or singing noise in the ears and occurs in about two-thirds of all the cases of ear disease. The generally accepted explanation of their mode of production has been that the foreign body present in the canal or the inflammatory exudate in the tympanum produced a direct pressure on the tympanic membrane and ossicles, and thus indirectly through the foot plate of the stapes upon the endolymph of the internal ear and caused a simulation of the effect of a regular succession of sonorous waves upon the membrane. The explanation being unsatisfactory, he conducted a number of experiments and arrived at the conclusion that irritation of the tympanum causes a dilitation of the small blood vessels of the middle and internal portions of the ear, and that the sounds produced by the increased flow of blood in the neighborhood of the delicate terminal filaments of the auditory nerve are sufficiently loud to be appreciated by the person affected, and that sometimes they are sufficiently loud to be heard by the examiner. That if this be the true explanation of the etiology, the treatment should consist in the employment of some remedy that would tend to raise the blood pressure. For this purpose he uses one to two grains three times a day of the powdered extract of the supra-renal gland.

On Costal and Thoracic Resection for Pyothorax. (Annals of Surgery.)—Carl Beck prefaces his article with the quotation that: "Old cases of pytothorax should not exist, and when they did, the attending physician should be held responsible for their existence." He states that the histories of old pyothorax observed by himself invariably revealed the fact that thorough evacuation of the pleural effusion was omitted at an early stage—that is, until after the expansion

power of the lungs was materially impaired. In the majority of cases asperation therapy continued for weeks. In some a single incision was made and in others healing by the development of a so-called empyema necessitatis was looked for. In a few cases nothing was done, because the pyothorax was supposed to be of a tuberculosis nature.

He states that primary rib resection is advisable for many reasons. That it is unsurgical to treat abscess of the pleural cavity on principles which differ from those governing us in the treatment of other abscesses. In 55 per cent. of his cases solid masses were found that could not be aspirated. Aspiration should be reserved exclusively for exploratory purposes, for the cure of serothorax, and as a preliminary procedure where patients are extremely exhausted. No method except resection enables the surgeon freely to introduce the finger and examine the cavity by palpitation. The expansive power of the lungs can be estimated and if the diaphragm fails to rise and the pulmonal pleural approaches the thoracic wall to a limited extent only and the costal pleura appears to be fibrous, thoracic resection should be substituted for single costal resection. In those cases where the inflammatory irritation has continued for a long time, the pleura becomes thickened and immovable, the lungs fixed and inexpansible, the collapse of the chest wall has been the aim of the various operative procedures. Schede was the first to recognize that the thickened peura was the main obstacle for the healing process and must share the fate of the ribs—*i. e.*, removal. His operation is very severe, and Beck modifies it by making an irregular incision over the cavity and removing the ribs and soft parts.

The Oats Cure in Severe Cases of Diabestes Mellitus.—A translation of Professor Carl von Noorden's article from *Berlinerklinische Wochenschrift*, No. 36, September 3, 1903, appears in *The Post Graduate*. In this article Professor von Noorden states that he has treated upwards of 100 patients for shorter or longer periods by the oats cure, with very varying results. He uses for the daily dose at the beginning of treatment 250 grs. oats (Knorr's oatmeal), 100 grs. albumin (vegetable albumin, preferable rice albunim), 300 gm. butter. This was made into a soup and given every two hours. In addition a little brandy or wine and a little strong black coffee were allowed.

He reports his cases under five observations. Some very severe cases were apparently cured. Others were tided over a period of threatening coma and then placed under a strict diet. Others in which the sugar and acetone elimination was much reduced, but in which perfect freedom from sugar was not achieved by the oats cure. In a number of cases the glycosuria was not diminished, but increased or followed the course usually expected in severe cases. Mild cases do not appear to do well under the oats cure. He states that the fact has been pointed out before that a very single diet rich in carbohydrates is better borne by diabetics than a mixed diet poor in carbohydrates. To this category belong the rice cures, the milk cures, the potato cures. That the effectiveness of these forms of treatmnet are far behind the results achieved by the oats cure. That the latest facts adduced make it more than ever incumbent upon the physician to abstain from treating a diabetic patient by any standard formula, and to substitute strict individualization.



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THE SANITARIUM, Battle Creek, Mich.

The Early Signs of Pregnancy. (Jour. A. M. A.)—Johnson reports a sign of pregnancy which is observed as early as the fourth week, or possibly earlier, and consists of an intermittent softening and hardening of the vaginal portion of the cervix uteria with, in many cases, a change of color, from a pale violet to the normal pink hue, or the reverse. That these changes in consistence are rhythmic, more or less. The alternate softening and hardening is easily detected by digital touch, while the changes in color may be seen through a speculum. That these signs or processes are, in all probability, early manifestations of what is subsequently recognized as the intermitent contractions of the pregnant uterus, and are probably due to a necessity for some change in the uterine circulation incident to the nourishment and growth of the impregnated ovum. That he has never observed this sign in any other normal or diseased condition, and after a careful investigation of a large number of cases, he considers it an invariably early sign of recent impregnation.

Abortive Treatment of Boils.—A 2-per-cent-carbolic-acid solution is used. A hypodermic needle is inserted obliquely through the outer edge into the center and a quantity of the solution injected. The needle is then withdrawn and reinserted at another point of the periphery, etc., etc. The results are almost magical. The process of necrosis is arrested and the already dead tissue rapidly falls away.—*A. Bidder.*

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., JUNE, 1904. No. 6

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

Advice to Young Doctors Selecting a Location.

Having secured your diploma and passed the examining board of your State for license, you will be confronted with the question of a suitable location for practice. This is a serious question and should have close consideration and the exercise of your best judgment, as on it may depend the making or marring of your future success and usefulness in the profession.

With some of you the question may be already settled by the circumstances of your surroundings, but with the majority the location is unsettled. The first point to be considered is the amount of means at your command. Usually this is limited for it is not the wealthy class that read medicine, and by the time you are ready for practice, the ready money is exhausted and there is a need of early returns from work, consequently the location offering the best chance of immediate work and remuneration for it, is sought. It is better to make haste slowly right here, and take time for considering the subject. If you have not had hospital training a short time spent in the office of your preceptor or some good physician as an assistant, while you investigate different localities will not be amiss. I would not advise you to seek a position as assistant as a permanent place, for the sooner you are thrown on your own resources the better it will be for you. Still a short time under the direction of an experienced physician will give you more confidence in yourself, and enable you to use the theoretical knowledge you have gained to practicable advantage.

If possible to do so, you should select your first location with a view to making it permanent, or you should at least do so early in your professional career. Changes of location are sometimes necessary, but should be made only for the best of reasons. It takes time to build a practice in any place or community and when once built, it is much easier to retain it than to build a new one. The doctor can do better work among a well known people, and where he has studied the idiocyncracies and peculiarities of his patients, perhaps

many of them from infancy. The confidence gained in the heyday of young manhood, and the friendship, formed by the bedside of your first patients will be more lasting than those of later days, and will be sweeter to contemplate. Frequent changes are disastrous to the doctor's influence, to his usefullness as a physician and to his financial income, and should be avoided as far as practicable.

The character of the practice desired and your qualifications for it, are to be considered in selecting a location. There is no doubt but that, even with equal ability so far as the knowledge of medicine goes, one man will succeed better in a given locality than another of different character. The man should be in harmony with his surroundings. The power of fully adapting yourself to surroundings may not be possessed, as it is not granted to all of us. When possible to do this without lowering the dignity of the profession or jeopardizing your control of the situation, your position will be much enhanced, regardless of the location selected.

Especial consideration should be given your qualifications in deciding the question as between a city and a country practice. The demands so far as knowledge of medicine is concerned, are the same. It is in the general make-up of the man that decides his fitness for one or the other locations. Many of you, perhaps the majority, can make a practice in either city or country, but it does not follow that the advantages are the same for each individual. A good address, pleasant manners and refinement in dress are needed in practice any where, possibly they are nearer an essential in building a city practice. These can be cultivated, though the natural manners show to a better advantage.

A full contrast of a practice in the city with one in the country will not be attempted, but a few points will be mentioned. By a city practice is meant one so located that there is little if any necessity to travel in the country to do the work. It is obvious, that in the Southern States, only a few places offer these advantages, and furthermore the great majority of the doctors must do either a country practice or a much mixed one of both country and town work, for work in the larger towns even, necessitates some driving in the country.

To build a city practice requires more time, a larger outlay in furnishing an office, instruments, books and keeping up a degree of style more or less pronounced, according to the taste of the individual, and to a large extent the class of practice sought. The keeping of a team is not in every case essential, especially in the first months of practice, but is very desirable, if the expense can be met promptly. It adds to one's prestage, gives an advantage in making calls quicker and with less fatigue, is more business-like, and makes all parts of the city accessable independent of street car lines. With a small practice the exercise of walking in making professional calls may be beneficial and even needful, and arrangements can often be made for a livery turnout when needed for extra work. As the practice increase a team will become necessary.

The physical work is perhaps not so great, but the mental and nervous strain is much more. City and town people demand more attention, closer observation, and are more capricious in their views, as to what is required of a doctor. The competition, too, is greater, and as another physician is always in easy reach, but little dissatisfaction is required to effect a change in the

family physician, much less at least, than in a country practice. The cost of living will always be greater in the city, and while it takes longer to build the city practice, the financial returns are generally tne larger.

The county practice offers many advantages to the young doctor, especially if of limited means. The horse will be a necessity and a stock of drugs must be supplied, for the country doctor will have to dispense his own prescriptions. Outside of these the cost of preparation and living will be less and if the situation is a suitable one, the returns will be earlier. Usually the competition is not so intense, and it takes but little time for it to be known that a "new doctor" is in the neighborhood.

The country doctor should be something of a trader, or at least have a fair idea of the value of various commodities, and some knowledge of farming, for both these pursuits will come in as side issues to the practice. This is one of the objections to a country practice, as these side issues are so apt to interfere with the study of things pertaining to the profession.

It is better in opening an office for country practice to select a position in a thickly settled neighborhood, for no matter how much sickness there may be, if the people are not there, there will be no work to do. Sparsely settled sections require too much time and work to be satisfactory in any particular. Look out for a prosperous section, as only those in prosperous circumstances can meet bills promptly. If the location is to be permanent, too much attention cannot be bestowed on investigating the moral and social condition of its people. School advantages and church privileges should be inquired into, as these show to a very large degree the intelligence and morals of a community.

Even in doing country practice, it possible to do so, the office should be opened in a small village. Doctors are not allowed to advertise, but some publicity is desirable, especially to the young doctor just starting out, and the village offers opportunities for forming acquaintances that it is desirable to embrace. If this is not available get in or near some popular country store, or the postoffice. Even a cross roads with a blacksmith shop is sometimes desirable.

We are not partial to partnerships in medical practice, still if you can effect an arrangement with an old physician ready to retire, it may be well for you to do so. You will have to do most of the work, and generally for but little pay at first, but with better prospects for the future. Such an arrangement is desirable, when the retiring is a certainty and not based on some contingency, as is often the case.

The buying of a practice or a partnership is rather dubious, and is to be entered into with very great care. It is not every time that the practice can be delivered even if paid for, and it can hardly be expected that another will keep a practice together as well as the one who made it. The subjects of partnerships and purchase of practice will be treated more fully in a future article.

Treatment of the Insane.

From the cage on wheels in which the violent insane of 60 years ago were rolled into the sunshine for a change from the padded cell, to the modern hospital for the care of this class of patients is a long step, and we had thought it showed progress of a high order in treating mental diseases. As great as it is, Burr (*Medicine,* April, 1904)

claims that psychology is the most backward in progress of any of the allied medical sciences. He explains this on the grounds of the complex nature of the troubles presented. There is no fixed criterion by which we can be governed in estimating diseased conditions of the mind; there is no normal mind with which comparison can be made, as what is normal in one person would be abnormal in another. "All the world is queer but me and thee, and thee is a little queer."

Burr thinks that the needs of the day demands a closer study of causative agencies. The symptoms have been well studied, and many groups have been made in efforts to attain a classification that can be accepted as meeting the requirements of the nomenclature of mental diseases, but without success.

The data for the study of mental diseases is not wanting as, according to Courtney (*Medical Age*), in this country, roughly speaking one out of every 300 individuals is insane.

This needs to be investigated as to causative agencies, and Burr says (loco citato) that the answer to the question will probably be found through the aid of chemistry.

Heredity plays an important part in the production of insanity. Defective brain cells and the congenital coil may be the result of vicious ancestral bodily chemistry, and in this sense the great bulk of insanity may be ultimately dependent on chemical disturbances, still mental and emotional shock may be followed by mental disease, before any poison would have time to act; nevertheless the exciting cause of most types is some poison either taken from without and acting itself, or so disturbing bodily metabolism as to produce other poisons arising in the body as the result of myotic invasion, or otherwise. Source and origin of acquired insanity is not to be sought in the brain, but in abdominal and thoracic viscera, and in the ductless glands.

There are insanities of definite type that are practicably incurable. Prominent of these is paranoia. The victim is born of evil ancestry, is of intense egotism, and is generally trained in his original instincts by the family environments of an hysterical mother and an aberrant father.

Paresis follows closely as another example of the incurable insane, the mental breakdown following vicious indulgence in alcohol and venery being too far progressed to stay its course before the doctor is consulted, while a cure is generally impossible, much can be done for these cases by confinement in a hospital where a hygienic life will be enforced. Highly organized nervous individuals are subject to this form of insanity, and it can be prevented by a life of moderation in all things calculated to excite the nervous state, and especially so in the use of alcohol, and the control of the animal passion.

The high grade imbecil is the most dangerous to the community, and of most cost to the commonwealth, because the vicious instincts, inherited from medically bad ancestry—the recurrence of acute stages, and because he cannot be technically declared insane, he is always a menace to society and the commonwealth.

Courtney (loco citato) lays much stress upon the recognition and treatment of the incipient stages of insanity. "By incipient in this connection I mean those effects of physical and psychical causes to which any one may be subjected, but which in individual cases produce especially disorder of the brain, so that mental symptoms are the

prominent symptoms, but not yet so pronounced as to constitute certifiable insanity—for example, the depression and foreboding preceding actual melancholia, antedating delusions of self-abasement or of threatened disaster; drug and alcohol habituism with hallucinations and delusions, which can as yet be corrected; hysteria and neurasthenia, if insanity is developed, are for varying periods before in its incipiency, the fact being frequently recognized in retrospect. The recognition of this incipient stage, as distinguished from developed insanity, in which appear confusion, hallucination, and delusion, on which insanity may be so surely predicated as to warrant physicians, family, and jury in taking the step of formal commitment, is most important."

The curable class of insanity is very limited and the time—three to six months—in which a cure must be accomplished is very short. Delay in treating this class lessens the chance of recovery. Fifty-five per cent. of acute cases should recover if treated within three months. Fifty per cent. of those that do recover do so within six months.

In view of these facts and taking into consideration the repugnance that exists with the laity on having a member of the family declared insane, the hospitals should be very liberal in admitting these incipient cases and provisions should be made for a period of observation and treatment before it is practicable to say insanity is developed.

The responsibility of the family physician is very great in these cases, because he is nearly always consulted before seeing the specialist, and if recognized and courageously treated both as to announcing the diagnosis and applying the proper remedies, the majority of these cases can be cured.

The Country Doctor and the Medical Press.

The diffidence of the average doctor and the general practitioner, especially of those doing a country practice, in writing for the medical press is well known, and while the reasons usually advanced by him for this state of affairs lead to the conclusions reached, there is a fallacy in his arguments and the conclusions are illogical because his premises are false.

The specialist, the college professor, or the town doctor may be some more polished in his manners, wear better clothes, and be of more ready speech, but for true worth and genuine merit in the work the physician is called upon to do, the country doctor is the equal and in many cases the superior of his town brother. The country doctor's experiences are more varied, because all classes of cases come to him. He is thrown more on his own resources, since he cannot have the immediate consultation so often desirable and to be obtained in a town or city practice. He reads books, but he studies human nature and learns from the school of rugged experience, and so is well equipped for practice.

These are not new truths, for they have been known and written of before. We advance them only because we wish to urge upon the rank and file of the profession as found in the country doctor the importance of contributing to the medical press. This journal has no difficulty in securing aricles for publication, and we believe this to be the case generally with medical journals. It is the desire of the managers of this journal that it shall promote the interests of the medical profession in every way possible, and we believe nothing will do more towards accomplishing this, than for the

country doctors to give their experience in practice. There are none of us but what have met with unusual cases, that give us trouble in treating. Your experience may be valuable to some one else. It is to urge the writing out of unique experiences, difficult cases, or favorite prescriptions that we write this. It is a duty each one owes to the profession that he shall add his mite to the sum total of advances or give aid and council to his professional brother wherever he can. To do this in the way of writing out one's experiences should be no great hardship. Not one but would be willing or even glad to have consultations with another physician in serious or difficult cases, and would find no trouble in discussing the case in all its bearings.

We were discussing this subject a short time since with an eminent surgeon, a college professor and the chief of a large and popular hospital, and he spoke in high terms of the ability of the country doctor, especially as shown by the letters accompanying patients referred to him for operation, seventy-five per cent. of his work being of this class, the majority of the doctors not only giving the correct diagnosis but showing also an intimate knowledge of etiology and pathyological conditions. It was some wonder to him why there should be so much diffidence and backwardness on their part in writing for the medical journals.

Perhaps the chief source of this diffidence in the country doctor is his lack of system. He does not have his work systematized, and there is too much hap-hazard about it. He trusts too much to memory and takes too few notes. His cases are not tabulated, and consequently there is difficulty in comparing them. For want of definite system as to his reading, office work and practice coupled with the time necessarily spent in traveling over the country, his opportunities for this class of work is limited.

The country doctor has the ability to write, and the experience from which to draw in order to make interesting reading. The time for doing it can be secured if the will is present.

The larger majority of the readers of this journal are located in the country and small villages, and in writing for its columns, it is this class of physicians most benefited, and most of them will welcome articles from their fellows in practice.

Perhaps the most urgent reason for his writing for the press is the good it will do him individually ,while study broadens the mental faculties. writing inculcates exactness. the sifting out the salient points, the searching for truths, the comparing of one's knowledge with that of others, and confidence in himself. It quickens the perceptive faculties, and develops the powers of observation.

An exchange says that Metchnikoff inoculated a chimpanzee with virus ffom a baboon. No secondary manifestations have appeared during the ninety days since. Further inoculation with human virus has proved equally negative. There is a possibility that the first inoculation from the baboon conferred immunity to the human virus. He is awaiting the arrival of a consignment of chimpanzees to repeat the experiment on a large scale. It will be remembered that Roux and Metchnikoff have devoted the large prizes bestowed on them last year to this research on anthropoid apes.

THE FIFTY-FIRST ANNUAL MEETING.

The Medical Society of the State of Norrh Carolina—Over 400 North Carolina Doctors were Present.

This meeting, the largest in the history of the society, was called to order in Raleigh on Tuesday, 23rd of May, with the president, Dr. H. B. Weaver, of Asheville, in the chair.

Dr. B. F. Dixon, the State Treasurer, and Mr. Ed Chambers Smith, of Raleigh, each delivered an address of welcome, to which Dr. J. M. Parrott, of Kinston, replied in his happy and characteristic style.

Dr. H. B. Weaver, the president, then delivered his address in which he paid his respects to the process of reasoning by which the medical laws of our State was construed, not to apply to osteopathic "doctors;" also to "Judicial Legislation," as shown in the Biggs case. He also congratulated the society on its growth under the plan of reorganization inaugurated last year. One year ago the Society had about 250 members in good standing, with their dues paid; now there are 927 members in good standing, with 72 counties represented in the House of Delegates.

Continuing, he took up the subject of tuberculosis, saying, in part, as follows:

TUBERCULOSIS.

"There is no question which is attracting more attention from the public from a social and economic standpoint, nor a problem of more absorbing interest to-day, to the physician, from a medical and a humanitarian aspect than the scientific and economic consideration of methods and means for the prevention and cure of tuberculosis or consumption. More has been said and written of this subject in the two last decades than all other medical subjects put together.

"To-day we stand facing the vital statistics of the world, which tell us that two millions of people die annually from this frightful scourge; that this migration into eternity goes on at the rate of 8,000 for Canada and 150,000 for the United States yearly. Every day 3,000, and each minute of the day two persons fall from this enemy. Eminent men, who have been engaged in pathological work for the last twenty years have come to the conclusion that 96 per cent. of the entire population of the civilized world, over the age of 18, is tainted with tuberculosis in either its latent or active form. That is the cause of one-third of all deaths that occur between thte ages of 15 and 45, the period of usefulness, or the productive period. These facts prove that tuberculosis is more a social problem than a purely medical one. As a social problem it makes it a matter of grave concern to all members of society; its prevalence depends largely on social conditions; in turn it aggravates social evils, and its practical eradication depends on social activity.

"It is estimated on statistical experience that of the eighty millions of population in this country, ten millions of the people are doomed to die of consumption, who might otherwise survive for many years. Every year we pay tribute to this disease in the form of sacrifice, a hundred thousand victims in the prime of life, together with untold treasure. The cost and slaughter of war are insignificant in comparison.

"Koch demonstrated that it was an infectious communicable disease caused by a germ. Therefore, it follows as a

necessary conclusion from his demonstration that it was absolutely a preventable disease. Therefore, in view of what has been said, what are the practical deductions to be made from all these facts in our combat against tuberculosis?

"From the latest data at my command, I estimate there were in 1902 about 3,600 tubercular people in North Carolina. According to the mortality rates it would give 3,000 annual deaths from tuberculosis. Are not these figures alone sufficient to convince us of the necessity of the mobilization of all our social and political forces in education of public opinion up to the point of demanding legislation on the subject? And when we have done this the ways and means will be forthcoming for the establishment of hospitals and camps in suitable portions of the State for the care of the indigent, sick consumptive.

"I, therefore, present this idea for the consideration of the Committee on Public Policy and Legislation, and ask them to discuss the proposition of the advisability of presenting, through the House of Delegates, a paper to the next Legislature of North Carolina for the Governor to appoint a committee of five members to be composed of two laymen, two medical and one from the Board of Health, whose duty shall be to report plans, specifications and cost of one or more hospitals or camps to be erected on the most desirable and healthy climate of the State for the cure and treatment of people affected with tubercular disease. The cost of this enterprise is not beyond the ability of the State to pay, when we consider it from an economic and humane standpoint. Basing our calculations on the expenditure of the sanatorial institutions in other States, there could not be built and equipped hospitals for the accommodation of 500 patients for less than $200,000, and for expense of running the establishment not over $100,000 per annum. These figures dwindle into insignificance when compared to the loss of millions sustained by the State as a direct result from the ravages of this disease. A great deal can be accomplished for this great movement through the organized efforts of the individual county society. Sixty-two societies with 927 active members can accomplish much in the way of moulding public opinion in regard to prevalence and prevention of tuberculosis."

Following Dr. Weaver's address, Dr. Joseph Graham, of Raleigh, read a paper on "The Value of Knowing the Composition of the Food Used in Feeding Infants," Dr. R. H. Whitehead, of Chapel Hill, on "Dermoid Cysts of the Ovary, with Demonstration of Specimens."

In the afternoon the following papers were read:

"Papillomata and Their Degenerations," Dr. Wm. deB. MacNider, Raleigh.

"A Plea for More Just Judgement of Drug Users," Dr. Geo. S. Petty, Memphis, Tenn.

"A Modern Method of Treating Morphine, Whiskey and Other Drug Addictions," Dr. S. M. Crowell, Charlotte.

"Some Uses and Abuses of Glasses," Dr. R. V. Brawley, Salisbury.

"The Treatment of Joints Injured by Chronic Rheumatism," Dr. Michael Hoke, Atlanta, Ga.

At night Dr. J. G. Blount, of Washington, read the annual essay on "An Ounce of Prevention," and this was followed by a general debate on "Diphtheria." led by Dr. J. A. Williams, of

Reidsville.

On Wednesday the following papers were read:

"Hook Worm Disease," Dr. C. A. Julian, Thomasville.

"Uncinariasis in the Mountains of North Carolina," Dr. W. P. Ivey, Lenoir.

"Uncinariasis in Eastern North Carolina," Dr. J. L. Nicholson, Richlands.

"Infection," Dr. I. W. Faison, Charlotte.

"Immunity," Dr. Albert Anderson, Wilson.

"Uric Acid and Metabolism," Dr. Ben K. Hays, Oxford.

"Pneumonia," Dr. John C. Montgomery, Charlotte.

"Report of 14 cases of Pulmonary Tuberculosis Five Years After," Dr. Louis F. High, Southern Pines.

"Cholelithiasis, With Special Reference to Surgical Treatment," Dr. Alfred C. Wood, Philadelphia, Pa.

"An Atypical Form of Typhoid Fever with Sub-Normal Temperature," Dr. J. D. Roberts, Mt. Olive.

"Adenoids in Children—a Plea for Early Recognition and Treatment," Dr. R. J. Teague, Roxboro.

The House of Delegates discussed a resolution offered by Dr. Paul Paquin, of Asheville, providing for a committee on Tuberculosis, to investigate ways and means for the further prevention of the disease, but no definite action action was taken concerning it.

On Wednesday night a large audience gathered in the Metropolitan Hall and heard the annual essay—"Aesculapian Dreams," by Dr. Charles A. Julian Thomasville, N. C.

The essay was followed by a lecture on "Radium and Radio-Activity in Relation to Medicine," by Dr. Charles Baskerville, of Chapel Hill, the noted chemist who recently discovered the newest element, Carolinium.

The doctors were then invited, and bodily carried, to the elegant rooms of the Capitol Club, and entertained as only Raleigh people know how, by handsome and lovely women and big hearted men.

MAY 26.

The following papers were read and discussed:

"Tuberculosis; What Shall We do to Check its Onward March?" Dr. S. P. Holding, of Wake Forest.

"The Treatment of Ununited Fractures," Dr. Stuart McGuire, Richmond, Va.

"Abdominal Surgery, with Special Reference to the Preparation and After Treatment," Dr. W. P. Whittington, Asheville.

"The Neurasthenic Condition," Dr. J. P. Munroe, Davidson.

"Immediate Repair of Lacerated Perinæii," Dr. P. A. Nicholson, Washington.

"A Protest Against Indiscriminate Surgical Operations Upon the Female Organs of Generation." Dr. A. K. Tayloe, Tarboro.

Exhibition of Specimens, Dr. H. A. Royster, Raleigh.

Adjournment at 5 p. m.

The meeting was avery profitable one. The papers were of a high order, but not sufficiently discussed, owing, in part, to the lenghty programme.

The doctors made their headquarters at the Yarborough.

We, the public that use hotels, had hoped that under the new management, reasonable causes for "cussing the Yarborough" would cease, but they continue. The hotel has been made over,

the rooms and furnishings are all that can be desired, but if a guest desired a glass of water and one of milk or cold tea at the same time, he could get them only by appealing to the head waiter. It does seem to the writer, who has spent two-third of his life for eighteen years in the hotel that when a man pays $2.50 per day he ought to be served with milk and water if he so desires, unless the cows and branches had "gone dry."

The House of Delegates.

This body met on Tuesday and organized. Doctors from some few counties that had been unable to organize under the plan inaugurated at the Hot Springs meeting of 1903 asking this body for admission to the society. They desired to continue members of the North Carolina Medical Society, but were barred by failure to organize their county societies.

After much heated discussion, the brethren were shown that under the constitution nothing could be done without changing it, which would require one year, and they were importuned to organize under the constitution at once.

On reaching the election of officers there arose a difference of opinion as to who should appoint the committee on nomination. After some hours of heated discussion the happy solution was reached, by the delegates from each counsellor district naming one member on the nomination committee to represent his district.

The following were selected on this committee:

1st District—Dr. T. S. McMullan.
2nd District—Dr. S. S. Daniels.
3rd District—Dr. F. H. Russell.
4th District—Dr. J. F. Miller.
5th District—Dr. A. C. Everett.
6th District—Dr. S. D. Booth.
7th District—Dr. S. S. Royster.
8th District—Dr. D. A. Stanton.
9th District—Dr. D. J. Hill.
10th District—Dr. J. Howell Way.

The following officers were elected for the ensuing year:

Officers.

For President—Dr. D. T. Tayloe, of Washington.

For First Vice-President—Dr. C. A. Julian, of Salisbury.

For Second Vice-President—Dr. John T. Burrus, of High Point.

For Third Vice-President—Dr. I. W. Faison, of Charlotte.

For Secretary—Dr. J. Howell Way, of Waynesville.

For Treasurer—Dr. G. T. Sikes, of Grissom.

Councillors—Dr. Oscar McMillan, of Elizabeth City; Dr. S. S. Daniels, of Windsor; Dr. F. H. Russell, of Wilmington; Dr. Albert Anderson, of Wilson; Dr. J. F. Highsmith, of Fayetteville; Dr. H. A. Royster, of Raleigh; Dr. E. C. Register, of Charlotte; Dr. D. A. Stanton, of High Point; Dr. T. E. Anderson, of Statesville, and Dr. J. A. Burroughs, of Asheville.

For Orator—Dr. C. P. Ambler, of Asheville.

For Essayist—Dr. John H. Tucker, of Henderson.

For Leader of Debate—Dr. E. T. Dickinson, of Wilson.

Reperesentatives to American Medical Association at Atlantic City in June—Dr. H. A. Royster, of Raleigh, and Dr. J. Howell Way, of Waynesville.

Chairman of Sections.

Anatomy and Surgery—Dr. J. P. Munroe, of Monroe.

Materia Medica and Therapeutics.—

Dr. R. A. Whitaker, of Kinston.

Practice of Medicine—Dr. W. H. Cobb, Jr., of Goldsboro.

Physiology and Chemistry—Dr. Lynn McIver, of Sanford.

Obstetrics—Dr. Thomas Stringfield, of Waynesville.

Gynæcology—Dr. W. P. Whittington, of Asheville.

Medical Jurisprudence and State Medicine—Dr. E. M. Browne, of Washington.

Pathology and Microscopy—Dr. W. deB. MacNider, of Raleigh.

Committee on Scientific Work—Dr. R. H. Whitehead, Dr. J. Howell Way and Dr. D. J. Hill.

Legislative Committee—Dr. R. H. Lewis, Dr. George W. Long, Dr. George G. Thomas, Dr. D. T. Tayloe and Dr. J Howell Way.

Finance Committee—Dr. J. A. Burroughs, Dr. T. E. Anderson and Dr. F. Duffy.

Chairman Committee of Arrangements—Dr. Charles Robeson, of Greensboro.

The society will meet next year in Greensboro.

Work of the Board of Examiners.

There were 96 applicants for license, of whom three withdrew. Seventy-two were granted license, showing a percentage of failures lower than last year.

The successful applicants are named below:

John H. Martin, Poindexter.
Wm. T. Moor, Vultare.
Richard N. Littlejohn, Charlotte,
Albert D. Edwards, North Wilkesboro.
James I. Bradshaw, Relief.
Arthur P. Willis, Mars Hill.
Geo. M. Chapman, Logan's Store.
Robert M. Andrews, Cliffdale.
Dougald C. McIntyre, Lumberton.
Richard E. Windley, Lake Landing.
Walter E. Everhart, Newton.
Wm. W. Craven McKeesport.
Jasper L. Beam, Crouse.
James F. Laton, Albemarle.
Campbell A. Baird, Bethel Hill.
Celus G. Ferebee, Shiloh.
Eulalie M. Abbott, High Point.
James T. Justice, Jacksonville.
Joe Thomas Davis, Gumberry.
James J. Stewart, Newton.
Wm. Franklin Smith, Salisbury.
Hugh E. Bowman, Davidson.
Hugh R. Thompson, Reidsville.
Frank L. Sharpe, Statesville.
Marshall C. Guthrie, Raleigh.
Wm. A. Bradsher, Roxboro.
John H. Stanley, Raleigh.
A. McNeill Blair, Southern Pines.
J. Robert Lowry, County Line.
Jesse E. Ward, Wilson.
Doctrine H. Reed, Washington, D. C.
Bedford E. Love, Leesburg.
Chas. C. Orr, Charlotte.
Sanders P. J. Lee, Dunn.
Chas. C. Orr, Charlotte.
B. C. Lamb, Elizabeth City.
Everett A. Lockett, Winston-Salem.
Jno. Lawrence Nicholson, Washington.
Jno. William McGehee, Madison.
Julian B. Busby, Salisbury.
Calvin H. Hicks, Durham.
Nathaniel A. Orr, Charlotte.
Arthur W. Greene, Powellsville.
John I. Myers, Wilkesboro.
Thos. H. Wright, Charlotte.
Wm. P. Simpson, Wilson.
Wade H. Anderson, Wilson.
Caroline J. Young-High, Southern Pines.
Wm. N. Dalton, Danbury.
Wm. M. Strong, Charlotte.
Arthur E. Billing, Charlotte.
Leighton W. Hovis, Charlotte.
Thos. F. Reynolds, Leicester.

John B. Gibbs, Burnsville.
Robt. H. Bradford, Charlotte.
Henry C. Solomons, Buck Shoals.
H. H. Garner, Asheville.
Euel H. Lyon, Stem.
Alvan A. Nichols, Painter.
Joseph B. Riddle, Bridgewater.
Chas. E. McLean, Gastonia.
Wm. I. Taylor, Harrell's Store.
John O. Plummer, Warrenton.
Everett L. Hoffler, Greenville.
Joseph B. Philip, Spring Hope.
John H. Bourneman, Wilmington.
John R. Williams, Asheville.
May S. Miles, Greensboro.
Benj. G. Allen, Henderson.
Thos. J. Holt, Smithfield.
Wm. H. Coffman, Asheville.
Robt. J. Orr, Robbinsville.
Sheridan C. Highway, Murphy.

The ranking men were: First, Dr. Marshall C. Guthrie, of Raleigh, with 94 1-7 per cent.; second, Dr. Hugh E. Bowman, of Davidson, with 92½; third Dr. Wm. A. Bradsher, of Roxboro, with 92 2-7.

Examination Questions.

ANATOMY.

By James M. Parrott, M. D., Kinston, N. C.

1. Describe the upper extremity of the Ulna bone?

2. Describe the lower extremity of the Tibia bone?

3. Describe the Superficial Palma Arch and give its relations?

4. Name the coverings of a complete indirect hernia?

5. Name the structures divided in an amputation through the middle third of the thigh and give the relations of the blood vessels at this point?

6. Through what structures would you cut in operating for appendicitis, the site of the incision being midway between the Anterior Superior Spinous process of the ilium and the umbilicus; name the structures in the order in which they are divided?

7. Give the relations of the gall bladder and name its surgical landmark?

8. Give the boundaries of the Superior Carotid Triangle ("triangle of election") and name its contents?

9. (a) Describe the Fissure of Sylvius? (b) Locate Broca's convolution (the inferior frontal convolution)?

10. What muscles or group of muscles are supplied by (1) the Musculo-Spiral nerve and its branches? (2) Posterior Tibial nerve and its branches?

11. Give the boundaries of the Ischio-rectal Fossa and describe its contents?

PLEDGE.

N. B.—Answer nine questions only.

PHYSIOLOGY AND HYGIENE.

By M. H. Fletcher, M. D., Asheville, N. C.

1. Give histological structure of Blood. What are its functions?

2. Describe briefly the Lymphatic System?

3. Describe the Salivary Glands; give anatomical relations; Nerve supply; name their ducts?

4. What type of a Gland is the Kidney? Describe a Malpigian Body?

5. Describe the Thyroid Glands? Give function of the Thyroids and Parathyroids?

6. Name the classes of substances which all food stuffs contain? What are Proteids?

7. Name products removed from the system by Bile? As a digestive secretion what are its most important functions?

8. Give origin course and distribu-

tion of Tenth Cranial or Pneumogastric Nerve? Effects of section of both Vagi Nerves?

9. (a) What are the effects of Paralysis of the Seventh Cranial Nerve on the special senses of sight, hearing, smell and taste? (b) Name the internal layer of the Retina?

10. Define Disinfectants. Antiseptics, deodorants and name the principal ones of each class?

CHEMISTRY.

By Geo. W. Pressly, M. D., Charlotte, N. C.

1. Give the composition of the Atmosphere?

2. What is meant by the boiling-point of a liquid?

3. Give symbol and atomic weight of Calcium; Carbon; Phosphorus; Sulphur?

4. Give formula for Nitrate of Silver; for Glycerin?

5. How is Chloroform tested for Impurities?

6. Give a test for Bile in the Urine?

7. What is the chemical nature of Urinary Calculi?

8. Convert one Kilogram to Lbs. avourdupois.

9. What is Green Soap?

10. What is the specific gravity of pure Ether?

OBSTETRICS, GYNECOLOGY AND DISEASE OF CHILDREN.

By Chas. O'H. Laughinghouse, M. D., Greenville, N. C.

OBSTETRICS.

1. Give Indications for Forceps?
2. Give Indications for Version?
3. Give Varieties of Placenta Prævia?
4. Define Hourglass Contraction?

GYNECOLOGY.

1. Give Indications for Curetting the Uterus?
2. Give causes of Amenorrhœa?
3. Give Diagnosis of Carcinoma of Uterus?

DISEASES OF CHILDREN.

1. Give Varieties of Stomatitis?
2. Give etiology of Enurisis?
8. Give Sequelæ of Measles?

PRACTICE OF MEDICINE.

By A. A. Kent, M. D., Lenoir, N. C.

1. What is the duration of the period of incubation in Diphtheria, Parotitis, Rubeola, Scarlatina, Typhoid Fever, Variola?

2. How soon after recovery, counting from first day of attack, would it be safe to the public to allow a patient recovering from Scarlatina, Rubeola, Diphtheria, or Variola to go out of quarantine and what preventive measures would be necessary?

3. Name the best means of disinfecting the dejecta in Typhoid Fever and state how long its use should be continued, counting from first day of attack?

4. Explain briefly, giving cause, the difference in Quotidian. Tertian and Quartan Intermittent Fever?

5. Write a single prescription for Acute Coryza? One for Hysteria?

6. Define Aneurism and Arteriosclerosis?

7. Define Aphasia and give the lesions which cause it?

8. Name the point of maximum intensity and sound of heart with which you will hear the murmur (1) Aortic Stenosis, (2) Aortic Regurgitation, (3)

Mitral Stenosis, (4) Mitral Regurgitation, (5) Tricuspid Regurgitation?

9. Define Gastralgia and write a single prescription for it?

10. Give diagnosis of the following case: Young man has been exposed to cold, onset sudden, chilliness, some nausea and vomiting, headache, restlessness, muscular twitching, pain and tenderness in the lumbar region, dyspnœa, pulse slow, hard and tense, temperature 102 degrees not constant, pallor and puffiness of eyelids and face, soon a swelling about the ankles and legs, urine scanty, smoky-red color, acid, specific gravity 1025, on boiling a thick, curdy precipitate forms?

Answer the questions briefly and to the point, but do not write everything you can think of about the diseases named.

MATERIA MEDICA AND THERAPEUTICS.

By J. T. J. Battle, M. D., Greensboro, N. C.

1. Give therapeutic uses of quinine. Explain its uses in malaria and when it should be administered for its best effect?

2. Give dose of Arsenious Acid; its effect upon the system; thereapeutic uses; treatment in case of poisoning?

3. Mention four preparations of Opium, and two Alkaloids; dose of each; its physiological effect; symptoms and treatment of toxic dose?

4. State the physilological actions of the Bromides; dose of five preparations; thereapeutic uses?

5. How does Iodine effect the system? Mention four preparations, and its therapeutic uses?

6. What is the common name of Veratrum Viride? Mention the preparations and dose of each; phyisiological actions and therapeutic uses?

7. What are the physiological actions of Iron, and its medicinal uses?

8. Give dose physiological actions and therapeutic uses of salicylic acid?

9. Name the ingredients composing the following: Seidlitz Powder, Black Wash, Tartar Emetic, Carron Oil, Basham's Mixture, C. C. Pills, Donovan's Solution, Fowler's Solution? Give common name for each of the following: Ferri Sulphas, Sodii Sulphas, Liq. Am. Acet., Gossypium, Oleum Tiglii, Massa Cerulii, Oleum Terebinthinæ, Potassii Nitras?

10. What is an Hypnotic? Sudorific? Collyrium? Clyster? Hæmostatic? Anodyne? Astringent? Galactagogue? Rubefacient? Emenagogue? Antiseptic? Mention one of each?

SURGERY.

By H. Russell, M. D., Wilmington, N. C.

1. (a) Define a Fistula? (b) A Sinus? (c) Treatment?

2. Give the symptoms of Septicæmia?

3. Give symptoms and treatment of Osteo-Myelitis of the Tibia?

4. What first aid would you render a patient who had received the following injuries: (a) incised wound of the scalp? (2) Compound fracture of both bones of the leg—bleeding freely?

5. Give symptoms and treatment of fracture of Clavicle?

5. Give symptoms of Carcinoma of Breast?

7. Give symptoms of Carcinoma of Uterus?

8. Give symptoms of Internal Hemorrhage?

9. Give differential diagnosis of Hydrocele—Treatment?

10. Give in detail the method of performing Tracheotomy.

Vin Mariani. —Vin Mariani is a proprietary preparation only in name. It stand for originality and reliability, representing just what it is claimed to be. Perfection is attained under expert possibilities with machinery which is the out growth of long years of specialism confined exclusively to Coca products. Numerous endorsements, from physicians in various parts of the world who are using Vin Mariani in daily practice, praise its unique qualities as a tonic and restorer of nervous and muscular strength. Vin Mariani was used by the profession fully twenty years before cocaine was known in medicine. In fact, through this preparation physicians were made familiar with the properties of Coca, and this was the original and only available form of employing the remedy. The popularity of Vin Mariani has led imitators to foister upon the profession artificial substitutes concocted by adding cocaine to wine. Such base frauds masquerading as Coca Wine—a title originated by M. Mariani —have done great evil and tend to unjustly cause condemnation of all coca preparations as but false products.

The Pain in Rheumatic Gout.—Chas. F. Heil, M. D., late Professor of Anatomy, Indiana College of Medicine, Indianapolis, Ind., in the *Mobile Medical and Surgical Journal,* states: "Many of the cases of rheumatic gout which I have treated were of an obstinate and complicated character, and I must state that I myself have been suffering with an attack in the nature of a very severe inflammatory condition, situated in and over the articulations of my wrist, knee and ankle joints. The pain which I suffered most of the time was indescribable. I placed myself under the care of a physician, who, upon examination, pronounced me also slightly affected with cadiac trouble. I suffered the most excruciating pain for ten days and nights, without alleviation of my sufferings, nor apparent signs of progress for the better. Knowing full well the efficiency and value of Antikamia Tablets in these cases, I took two tablets and about ten minutes after taking them the pain was relieved, I perspired slightly and then fell into a gentle sleep. The result was simply magical. I eight hours in perfect rest, free from all pain. I continued the two tablets every four hours during my convalescence and until complete recovery."

The *Paris Tribune Medicale* says: Glycogen whose properties were regarded at one time more or less as an illusion of Dr. Jacque de Nittis, has proved to have quite new and unexpected properties.

Mennier (*Societe de Therapeutique*) states that he has obtained better results with this agent than any other in the cure of hypo-chlorhydric diseases of the stomach. Emaciation was arrested by its exhibition.

Hirtz, Gilbert and Landrieux claim to have proved its tonic and stimulant effects in diabetes.

Laumonier finds that diabetic patients treated with glycogen have nearly always improved, not only by the diminution of the glycosuria, but also of other symptoms of diabetes, polydipsia and polyuria, emaciation and loss of strength.

Lebon has observed remarkably good effects with it in a serious case of *icterus gravis.*

Glycogen appears to act very energetically in infectious diseases and intoxications, by reason of its tonic action on the cellular elements, as well

as on the leukocytes.

Sanmetto in Original Package.—Sanmetto proves an admirable success whenever prescribed in the original package. thereby getting the genuine article. Sometimes I give a prescription in smaller quantities, and am disappointed in the results, thereby convincing me that a spurious article has been palmed off on my patient.—*S. B. Haygood, M. D., Marble Falls, Tex.*

Sanmetto in Noctural Emissions and Frostatic and Urethral Troubles.—I have been using Sanmetto ever since it has been before the medical profession. Sanmetto, as prepared only by Od. Cd Med. Co., New York, has never disappointed me, but substitutes have. The scope of usefulness of Sanmetto is much larger, in my humble opinion, than has ever been claimed for it. In nocturnal emissions, resulting from self-abuse, I have found Sanmetto very nearly a specific, as well as in all prostatic affections. For a number of years Sanmetto has been my sheet anchor in gonorrhœal troubles. It is one of the proprietary medicines that we could not well do without.—*L. L. Janeway, M. D.*, Whiteville, Tenn.

MEDICAL NEWS AND ITEMS.

(From Medical Age, Detroit.)

Dr. M. P. Ravenel, of the Henry Phipps Institue, of Philadelphia. will shortly sail for Italy for the purpose of investigating, with Professor Maragliano, the question of specific therapy of tuberculosis.

According to newspaper reports, Dr. Samuel Darling, of the College of Physicians, and pathologist at the City Hospital in Baltimore, has isolated the germ which causes mumps.

The experience in Chicago's Health Department in 7,435 cases of diphtheria shows that the mortality when antitoxin is used is 6.5 per cent. The mortality without antitoxin is still about 35 per cent.

The question of medical practice in Spain by holders of foreign diplomas has recently formed the supject of animated debate in the Spanish Senate. The discussion has so far led to no definite conclusion, but from the reports that have been published, it may be gathered that a foreign doctor can at present practice his profession in Spain without the necessity of submitting to any further examination.

It is reported that Dr. Ludvig Hektoen, head of the Memorial Institute for Infectious Diseases, will go to Europe for the purpose of making extensive experiments on apes, in the hope of finding the scarlet fever germ. He will undertake thte trip because of the difficulty and expense of bringing the animals to this country.

Two Physicians of the Hamburg Institute for Tropical Diseases, Messrs. Otto and Neumann, have gone, according to an exchange, to South America for the purpose of studying yellow fever. They are supplied with considerable means furnished by merchants and shippers of Hamburg. In addition to scientific studies they are to collect information with reference to the new preventive measure now used in South America against yellow fever, and to devise means to prevent the heavy damages which the German merchant marine has suffered in the several years of the yellow fever epidemic.

The Virgina Legislature has recently passed a law, which goes into effect within sixty days, forbidding the sale of cocaine, and no one can buy it except physicians, dentists, and druggists. The present law on the subject is, according to the *Medical Record*, not so stringent. It is said that cocaine addiction is a common vice among the street Arabs of Richmond, and is encouraged by some conscienceless druggists, who sell the drug in any quantity to the boys and others without ascertaining the use to which it is put. It is hoped the penalties for the violation of this new law will put a stop to this practice.

A novel method is that adopted in Norway for turning a drunkard from error of his ways. The patient is placed under lock and key, and is fed at frequent intervals on bread saturated with port wine. For the first day this is no doubt palatable fare; on the second it begins to pall, and fails to tempt the appetite; on the third day the prisoner turns from it with obvious distaste. But he must either eat or starve; and before the eighth day sets him free he has acquired such loathing for intoxicants that he more often than not spends the rest of his days a rabid teetotaler. At least that is what is asserted, and the reader can believe as he likes about it.

The directors of the Putiloff Engineering Works, of St. Petersburg, the Krupps, of Russia, are placing a sanitary infirmary train at the disposal of the field forces in connection with the war in the Far East. The cost of this train, says the *Nuvoe Vremya*, will be over 100,000 roubles ($50,000). It will consist of an engine, a tender, and ten wagons, and is at the present moment being rapidly got ready in the special model factory of the firm. The latest improvements have been introduced into the fittings of the wagons for removing the seriously wounded, to the smallest detail, and everything in connection therewith answers to the latest requirements of science and the exactions of clinical practive and experience. For the medical staff, dispensary, kitchen, etc., special wagons are fitted, and all is arranged to yield the greatest comfort and practical use.

Medical circles in Germany are much interested at present in a certain Mme. Magdeleine G——, a Russian, who gives a most artistic dancing performance in a hypnotic sleep. The performance is a musicale, but after being hypnotized by her manager, Magnin, of Paris, the sound of music impels her to dance, while she falls into a cataleptic condition the moment the music ceases. Our current German exchanges contain a number of articles on the subject. Furer writes to the *Deutsche Medicinische Wochenschrift* that the entertainment seems like a revival of the barbarous practice of exhibiting insane patients to the gaping public. Grunwald in a letter to the *Munchener med. Wochenschrift* takes much the same stand. He expresses the hope that Munich Medical Society, which is the first scientific society before which the trance dancer has appeared, will insist on the pathologic character of the performance and protest against its being permitted as a public entertainment.

Influenza.—According to Hirsch, the first trustworthy records of this disease date from the twelfth century. Grip first appeared in the American colonies in 1627, and an epidemic swept through the New England settlements in 1647. The latest pandemic, 1889-90, originated in Central Asia, spreading through Europe to this country.

EVERYBODY'S MAGAZINE, June, 1904.

Should the readers of a magazine have the opportunity to dissent from or comment on the articles the publication presents? Hitherto there has been no method of replying to editorial opinions set forth in our monthlies, but *Everbody's,* with its usual originality, proposes that anyone who does not agree with its contributors' views shall have the opportunity to set them right or approve, as seems proper. In the new department, "Straight Talk," in the June issue of this magazine, a number of readers have taken advantage of this opportunity to criticise Dr. Hillis's conception of a consolidated church; most of the writers frankly disagree with his views.

Another departure in this issue is the publication of a series of caricatures of the presidential candidates by the well-known caricaturist, Fornaro. There are eight of them, and they are presented at a season when the artist's conception of the appearances and characteristics of these distinguished Americans will be most interesting. One of the number is David Rowland Francis, who is also chief of the World's Fair at St. Louis; and so the study of this able Missurian, contributed by Alfred Henry Lewis, has a double appropriateness.

Considerable controversy is liable to be provided by an anonymous article entitled, "Is America Developing an Aristocracy?" which deals in a peculiarly frank manner with a typical group of the sons of American millionaires. The writer declares that, although every community has its own legitimate best society, we cannot in the European sense, ever have an American aristocracy. The fourth generation of a great family is scarcely ever able to take care of itself, and in proof he cites the careers of the younger Vanderbilts and Astors as showing how strong lines thin out in the latest generations.

There are several other articles of sterling interest: "The Home Life of Emperor William;" the story of the greatest American jockey, George Odom, by the clever writer on racing, Charles E. Trevathan; the second article on "Consumption, the Great White Plague," in which Eugene Wood tells how the fell disease, if taken in time, may be cured. There are ten stories, including a most exciting war story by Morgan Robertson.

VON BERGMAN'S SURGERY.—A system of Practical Surgery, by Drs. E. von Bergmann, of Berlin; P. von Bruns, of Tubingen and J. von Mikulicz, of Breslau. Edited by William T. Bull, M. D., Professor of Surgery in the College of Physicians and Surgeons (Columbia University), New York. To be complete in five imperial octavo volumes, containing 4,000 pages, 1,600 engravings and 110 full-page plates in colors and monochrome. Sold by subscription only. Per volume, cloth, $6.00; leather, $7.00; half morocco, $8.50, net. Volume II. just ready. 820 pages, 321 engravings, 24 plates. Leo Brothers & Co.

The second volume of von Bergmann's System of Practical Surgery appears so soon after the first that a prompt compilation of the whole is assured. American surgeons will then enjoy the privilege of having a complete library of practical surgery, reflecting its subject in its latest development, and simultaneously fresh throughout. We are informed that the German surgeons absorbed the early volumes of the first edition so rapidly that

a second edition became necessary before the compilation of the original issue, and that its appearance was immediately followed by translations into Spanish and Italian. The second edition revised and brought up to date in regard to literature and new matter, has been the basis of the present English translation. Moreover the corps of experienced surgeons who have translated the work under thte editorial supervison of Dr. Wm. T. Bull, have added those methods of practice which have gained preference in America. We noted in particular Carl Beck's modification of Schede's operation for old cases of empyema, in articles by Beck on this subject having recently appeared. Among the illustrations and colored plates, which form a special feature of the work, we see a number which have been drawn from American authors. This great work in its present form may, therefore, truly be regarded as reflecting the latest knowledge of the masters of surgery throughout the world. The first volume dealt with the Head, a regional arrangement which is conveniently outlined by the consideration of the neck, thorax and spinal column in the second volume, now at hand.

Transactions of the National Association of United States Pension Examining Surgeons.—Second Annual Meeting, Washington, D. C., May 13 and 14, 1903, Including Account of First Meeting, at Saratoga Springs, June 9, 1902 Vol. I. Published by the Association, Rochester, N. Y., 1903.

We congratulated the National Association of United States Pension Examining Surgeons upon their first volume of Transactions. It presents a neat appearance, is well gotten up and contains a number of well written articles. The articles on Chronic Malaria—Complications and Sequelæ, Digestive Complications, by Dr. John C. Hemmeter, and Physical Signs of the Heart—How Detected and How Described, by Dr. C. W. S. Frost, deserve special mention. We have nothing but praise for the Association and we believe that they will be the means of lessening a great deal of the abuse that abounds in the Pension Department.

EDITORIAL ITEMS.

(From Denver Medical Times.)

For Biliousness. — Bortholomew praises dilute nitromuriatic acid, 10-15 drops well diluted, before meals.

For Echthyma.—Ellis recommends the local application of compound tincture of benzoin, a dram to the ounce of lard.

Dermatitis Venenata.—In ivy poisoning Fox employs lime water as a soothing application, with gelseminum and other nervous sedatives internally.

Impetigo Contagiosa.—Fox directs to remove crusts with hot water cloths or poultices, then apply a 5 per cent. carbolic ointment.

For Schleroderma.—In its treatment, Shoemaker lays stress on hygenic care, tonics, alteratives, free diaphoresis, hot baths massage and electricity.

Hydrotherapy for Hyperchlorhydria.—Hemmeter claims that the latter condition is greatly benefitted by the former method of treatment.

For the Asking.—Write the New York Pharmacal Association for "Facetiæ Medicorum." Full of wit and

humor, it will amuse the doctor when he is tired.

For Pemphigus Vulgaris.—Fox directs to prick blebs and apply bismuth subnitrate on cotton, or, if ulcerated, to use an ointment of 15 parts each of zinc oxide and bismuth subnitrate to 70 parts of benzoated lard.

For Hives.—In acute uticaria sodium phosphate in dram doses after meals or oftener, is one of the best remedies. A. A. Smith recommends sodium salicylate, two grains for children every hour and a half.

Acute Hemoglobinuria of New-Born.—In Winckel's disease Brasher has had success by means of intestinal antisepsis with calomel, and benzonaphtol, and a careful diet of cream and water or diluted milk.

Dietetic Treatment of Epilepsy.—R. Balint *(American Year-Book of Medicine)* thinks that a diet of milk, butter, eggs, vegetables, and bread salted with sodium bromide gives better results than any other combination.

For Threatening Eclampsia.—Nicholson (quoted in *American Year-Book of Medicine)* states that in threatening eclampsia during pregnancy no other remedy is so useful as thyroid extract, pushed until it produces its full effects upon the circulation.

Veronal.—Diethyl-malonyl-urea is a white, crystalline, faintly bitter powder, soluble in 145 parts of water. It is used as a hypnotic, in doses of five to eight grains, causing sleep within an hour, and free, it is said, from bad after effects.

Japan.—Dr. Nicholas Senn offered his services to the Red Cross Society of Japan. Japan declines with thanks, or rather, the Red Cross Society declines on the ground that the organization has not the power to accept Dr. Senn's offer.

XRay Burns.—These lesions require several months to heal. Satterlee *(Medical Record)* recommends on retiring an application of one part of carbolic acid in eight parts of rose water ointment, to reduce the irritation accompanying this or any other dermatitis.

The Micro-organism of Scarlet Fever.—The *causa causans* of this disease *(New York Medical Journal)* is claimed by Mallory to be a protozoon, which he has discovered in the epithelial cells of the skin and tongue and in the superficial lymph vessels and spaces of the corium.

Arthritis Deformans.—Shoemaker *(Medical Bulletin)* treats this obstinate disease with vegetables, such as spinach, onions and garlic, containing large proportions of iron and sulphur; codliver oil, beginning with small doses; arsenic in its various forms; massage and the static breeze.

For Gall-Stones.—Pouchet recommends amyl valerianate in doses of 3 to 12 grains a day in capsules or emulsion. For impacted gall stones George Harley prescribes:: Acidi benzoici gr. x; potassii hydratis gr. ii ss; aquam dest, q. s. A tablespoonful in water t. i. d.

Anesthesin.—The ethylic ether of paramidobenzoic acid is a white, odorless, tasteless powder, insoluble in cold water, and innocuous in an ordinary dose. It is used as a local application in painful affections of the skin and mucous membrane, as for the dysphagia of tuberculous laryngitis.

Treatment of Thrush.—Escherick *(American Year-Book of Medicine.)* advises a silk or cambric sucking bag, enclosing a cotton tampon impregnated with boric acid and a little saccharin. On sucking this, there is a continuous action of the boric acid on the infecting agent.

The Clinical Application of Ingluvin

Ingluvin is the name given to a preparation made from the gizzard of the domestic fowl. Since its introduction, no remedy of modern times has attracted more attention among physicians far and near nor received higher endorsement than Ingluvin, which is now supplied throughout the world. The product occurs in the form of a soft powder of a yellowish-gray color and a faint odor. It is almost devoid of taste. A slightly bitter after-taste is left, but this soon disappears. Ingluvin is insoluble in water and the usual menstrua. It can be administered, stirred into water or milk, or in tea, coffee, chocolate, wine, etc., if no therapeutical objection exists. Its feeble taste is easily disguised. Ingluvin is also put up by its manufacturers (Messrs. William R. Warner & Co.) in convenient 5 grain tablets. The dose of Ingluvin is from 5 to 20 grains. Spread upon bread and butter it may be conveniently administered to children. Ingluvin possesses the advantage of being compatible with alkalies.

As the gizzard contains no peptic glands, the undoubted efficacy of Ingluvin cannot depend upon the presence of a digestive ferment analogous to pepsin. It has been ascertained that its virtues reside in a peculiar bitter principle which enters into its composition. It is prescribed in the same manner, doses, and combinations as pepsin.

Ingluvin is prescribed in the vomiting of Pregnancy, Dyspepsia from Uterine Disease, Colic, vomiting caused by Alcoholism, and other digestive derangements. It is likewise beneficial in dyspepsia when produced by functional inactivity. It will promptly check the diarrhœa which is caused by indigestion. By reason of its influence upon the stomach and bowels, Ingluvin is capable of marked service in cases of cholera infantum and cholera morbus.

The evidence in favor of Ingluvin in all cases of gastric disturbance is overwhelmingly convincing as to its superior efficacy over pepsin, and its use should never be neglected in any case of gastric irritability, no matter what may be the cause.

From the preceding abridged account it will be seen that Ingluvin possesses an exceedingly important sphere of usefulness. Disorders of the alimentary canal exert such a widespread influence, they are so often linked with profound general disturbances, and they are so distressing in themselves, that any remedy which demonstrates its efficacy in regard to those affections should be warmly welcomed.

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In fractures and dislocations, one of the advantages of early passive motion is that it can be exerted much more gently than at a later date, when the stiffness has increased.

High rectal injections of normal salt that it will not admit at least the entire hand for purposes of exploration.

In operations on the gall bladder, it is well to remember that jaundice, particularly when it has lasted a long time, is attended with an increased tendency t hemorrhage. In this class of operations we must always remember that the bile is presumably infected, and that it must be kept away from the general peritoneal cavity and its contents.

In surgery it is always important to beware of oft-repeated efforts. Never try too often to catheterize a distended bladder, if you don't succeed soon. It is better to tap. Never try too long to reduce a strangulated hernia. It is better to cut. Never try too often to insolution are the best means of combating excessive thirst after abdominal operations. Washing out the stomach just before the patient awakens from anesthesia has a happy effect in preventing, to a great extent, the nausea following ether.

Small abdominal incisions are of advantage whenever not too small to permit the operation to be easily done, but it must be remembered that, in the presence of inflammatory conditions, the incision should never be so small tubate a child; if you are not very familiar with the operation, it is better to tracheotomize.

How long shall we wash our hands before operating? The only answer to this is that we can never wash them long enough, since it is evidenetaois long enough, since there is evidence that we have no means of entirely sterilizing them. Rubber gloves form the only logical remedy, and should be always used unless there is good reason to avoid them, either because the operator cannot as easily feel tissues and handle needles with them, or because the surgeon is so careful of his hands that he has a legitimate belief that they are as nearly sterile as possible.

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Belladona Poisoning.—Blyth recommends the stomach pump or tube; an enema of coffee; one-half grain of pilocarpine nitrate, or morphine or opium in suitable cases; hot water to feet; alternate douches of cold and hot water; artificial respiration, if need be.

Drug Habits.—According to W. E. Nichols (*Wisconsin Medical Recorder*) the sales of "patent" medicines amount to over $65,000,000 annually and are steadily increasing. Most of these nostrums contain from 17 to 44 per cent. of alcohol. In 1902 three times as much cocaine was imported as in 1898.

Mortality from Pneumonia.—Since 1900 (*American Year-Book of Medicine*) pneumonia has caused the death of one-eighth of all persons dying in Chicago—one-third more than consumption and 44 per cent. more than all the other contagious and infectious diseases combined.

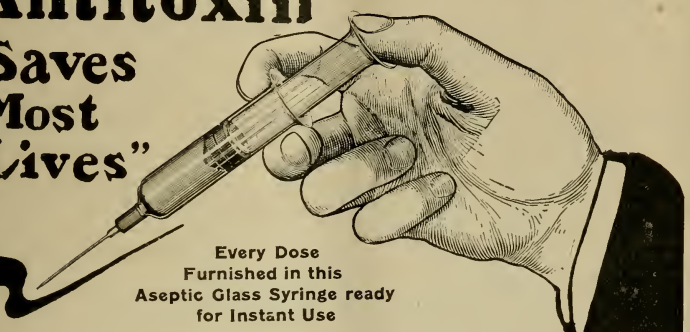
An Egg an Hour.—In serious conditions of nervous exhaustion, and in the progress of pneumonia, diphhtheria, typhoid and other fevers marked by high temperature and rapid waste, William S. Ely (*Dietetic and Hygienic Gazette*) has frequently given one raw egg hourlry with the most gratifying results. So far as the danger of albuminuria is concerned, he has seen albumin and casts disappear from the urine of a case of typhoid under his diet.

The *Fundal Incision* in the cæsarean section has the following advantages: (1) The wound being higher, the chance of ventral hernia is less. (2) There is less bleeding. (3) The placenta is less often in the way, and therefore less frequently cut into. (4) Extraction of the child is rendered easier. (5) The lower segment of the uterus being uninvolved, the wound is more readily stitched.—*Kerr.*

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The average mortality of cases treated with Antitoxin was:

On the First day	-	1.45
Second "	-	3.9
Third "	-	5.67
Fourth "	-	7.29
Later than Fourth "	-	14.49

Dr. H. C. Wood states that as soon as Diphtheria is suspected Antitoxin should be used. If Diphtheria develops, the disease is under control. If diagnosis is not confirmed, no harm has been done by the use of a reliable Antitoxin.

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Treatment of Carbon Monoxide Poisoning.—Pilcher (*Brooklyn Medical Journal*) advises the administration of pure oxygen and of copious infusions of salt solution, reinforced in the more severe cases by a direct blood transfusion; also the free use of cardiac stimulants, to prevent acute cardiac dilatation and edema of the lungs.

Syrup of Iodide of Iron.—M. D. Hoge (*Virginia Medical Semi-Monthly*) affirms that pale, strumous-looking children with enlarged cervical lymphatic nodules, associated with chronic catarrh of the throat or enlarged tonsils, are much benefited by the use of ten drops of this syrup after each meal. It acts here as an alterative, rapidly bringing about an absorption of the swollen lymphatics, and it enriches the blood.

Treatment of Morphine Habit.—J. Hoffman (*American Year-Book of Medicine*) advises the use of camphor, substituting it for the morphine, while the latter is given in gradually reduced doses. Camphor increases blood-pressure and contracts the heart-muscle, opposite effects to those produced by morphine.

The Rigor Mortis of Involuntary Muscles.—Placzek (quoted in *New York Medical Journal*) finds that the first two hours after death the pupil begins to contract, reaching the point of greatest contraction in from six to 24 hours; then it dilates. Neither contraction nor dilation is necessarily equal in the two pupils. Mydriatics used shortly before death have no influence on the post mortem conditions of the pupils.

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Overcomes Faulty Metabolism; hence, indicated in all torpid conditions of the system.

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Restores normal action to the eliminating organs; hence, the remedy for all pathological conditions with dry skin and dry secretions.

Dose: Half teaspoonful every two hours until better—then teaspoonful four times a day.

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Homarrhagic Erosions of the Stomach.—In discussing two cases of this character, S. Mintz (*American Year-Book of Medicine*) thinks that the condition should be termed chronic exfoliative gastritis or chronic ulcerative gastritis. Both patients recovered rapidly after using silver nitrate lavage.

Oil Treatment of Gastric Ulcer.—Olive oil is given by K. Walko (*American Year-Book of Medicine*) in the dose of a dessertspoonful at first, then as much as 50 c. c. three times a day. If the oil causes nausea, he introduces it through the stomach tube.

A Sure Cure for Earache.—A small funnel of stiff paper (*Courier of Medicine*) is inserted into the ear, with a pledget of cotton saturated with chloroform into the outer, larger part. By this means the fumes of chloroform are blown into the ear, and instant relief is obtained.

Treatment of Chicken-Pox.—Wm. T. Plant recommends reasonable care as to diet and exposure, with antiseptics and plentiful stimulation in gangrenous form. When convalescence is protracted with anemia or tuberculosis, he gives iron and cod-liver oil, nourishing diet and perhaps a change of air.

Barber's Itch.—J. J. Pringle states that epilation is most important—about one square inch daily—followed by an antiseptic ointment, such as 10 grains of salicylic acid to an ounce of mixed lanolin and olive or almond oil or diluted ointment of red oxide of mercury. Never poultice.

Dermatitis Exfoliativa.—Hyde utilizes jaborandi or pilocarpine; quinine, sodium salicylate, cod-liver oil and mineral acids as indicated; and Hebra's diachylon ointment (one part to four parts of vaselin, with 5 or 10 grains of salicylic acid to the ounce.)

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Puerperal Sepsis.—(*Cyclop. Med.*, April, 1904.) A century ago parturition was so often followed by fever of some kind that Nisbet defined pregnancy as "a certain inflammatory disposition of the body or nearly approaching to it." It was the rule at that time for the woman to run an elevated temperature during the puerperium. It was looked upon as unavoidable and due to the increase in the inflammatory tendency of the blood. Inasmuch as a woman may develop such a temperature, after she has had a child, from any cause that will produce fever in a nonpregnant woman, it becomes necessary, in the first place, to eliminate all possible causes other than those peculiar to that state. In other words, there is a difference between fever of the puerperium and fever in the puerperium. Strictly speaking, puerperal sepsis includes the following: 1. Puerperal fever or puerperal septicæmia of the worst and generally fatal type. 2. Puerperal sapræmia, which is usually accompanied by an offensive discharge and which is generally recovered from. 3. Puerperal pelvic cellulitis, also generally recovered from. 4. Puerperal pelvic peritonitis, nonfatal usually. 5. Puerperal pyæmia, often a late stage of any of the preceding, fatality depending on virulence of sepsis. 6. Phlegmasia dolens. This is now believed by many to be due to sepsis. 7. Milk fever. Inflammatory; often transient; probably septic; nonfatal. —*Peter Horocks* (*British Medical Journal*, February 13, 1904).

Cars for Consumptives.—Consumptives may be barred from first-class Pullman cars on the Santa Fe Railway. The plan involves the running of hospital cars at intervals on through trains. These cars will be especially equipped, and no one except invalids will be allowed to ride in them.

The innovation will be put into effect between Chicago and Kansas City to Colorado and New Mexico health resorts and California points.

The care of consumptives has always been a burden to the railroads. After a berth has been occupied by a consumptive it must remain unoccupied until the end of the run, when it is disinfected. This care for the health of the traveling public involves expense. There is prejudice against riding in cars known to have been occupied by consumptives. The hospital cars will probably be put in operation at the opening of the tourist business this season.—*N. Y. Herald.*

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Peritonitis.—(*The Post-Graduate.*) Forbes Hawkes states that some of the conditions which are liable to confuse us when we are confronted with abdominal rigidity are as follows:

The various colics—1. Simple. 2. Lead. 3. Calculous (biliary, renal and ureteral): Between the attacks, however, there will be no rigidity unless there is peritonitis.

4. Appendicular colic: He doubts its existence without some form of peritonitis. He has never seen so-called appendicular colic without some slight amount of persisting abdominal rigidity.

5. Lightning pains of locomotor ataxia: The intervals here are free from abdominal rigidity.

6. Pneumonia in the lower lobe or diaphragmatic pleurisy: This condition is receiving at times. The rigidity will be in the upper portons of the recti (one or both) and the breathing sounds will probably be diminished in the lower chest. Many mistakes are constantly made here especially in children.

7. Catalepsy: It would hardly seem worth while to mention this had not a recent case come to my notice where a patient was sent into the hospital with a diagnosis of typhoid fever and peritonitis. She was stuporous. There were several spots on the body not unlike those of the typhoid eruption. The adbomen was held as hard as a board but so were all the other voluntary muscles. The patient was in the cataleptic state from which she recovered in a few days.

Pregnancy, Early Signs of.—Cyclop. of Med., April, 1904). The writer gives a physical sign he has observed in a large number of cases before and including the third calendar month. This sign is noticed as early as the third week, and consists of an intermittent softening and hardening of the vaginal portion of the cervix uteri, with, in many cases, a change of color, from a pale violet to the normal pink hue, or the reverse. The alternate softening and hardening are readily detected by digital touch, while the changes in coloring may be seen through the speculum. These signs are probably the early manifestations of what is subsequently recognized as the intermittent contractions of the pregnant uterus and are probably due to a necessity for some change of modification in the uterine circulation incident to the nourishment and growth of the impregnated ovum through physiological intermittent congestion of the generative system. This sign the writer has never observed in any other normal or diseased condition. —*H. L. E. Johnson* (*Journal of the American Association,* February 20, 1904).

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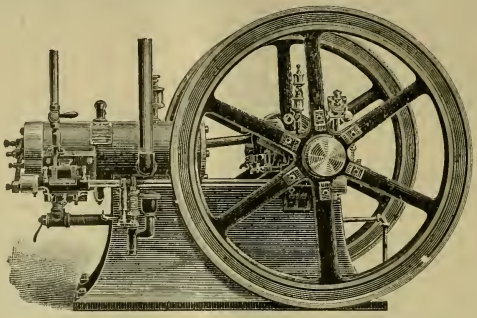
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Historic Outline of Cardiac Pathology and Clinical Aspects of Chronic Myocarditis. (Bulletin of the Johns Hopkins Hospital.)—Camac, in concluding his article on myocardial disease, emphasizes the following points:

1. The normal antomy and normal anatomy and physiology is essential to clinical study.

2. The knowledge of the pathological physiology of the heart must be closely studied by the clinician.

3. The study of myocardial disease must be greatly extended by bedside observation. This can only be done by an honest limitation of our clinical conclusions to the evidence at hand.

4. The diagnosis must be made in the early stages of the disease.

5. Even with the best methods, the diagnosis of chronic myocardial disease at least is difficult, and its nature obscure.

Bronchiectasis.—A patient was recently presented by Putnam, in whom he had evacuated several bronchiectatic cavities which gave out a profuse malodorous discharge. The cavities were emptied by means of the Pacquelin cautery at a low red heat, after they had been located definitely by means of an aspirating needle which was retained in position as a guide during the subsequent procedures. The wound healed nicely and without complications, and there has been no recurrence for more than a year.

Vaselin in Ozoena.—Brindel recommends interstitial injections of vaselin with a fusing point of 60 degrees C into the lower turbinate bones in cases of ozæna. The amount used is from 3 c. c. to 4 c. c. at each injection. —*La Presse Medicale.*

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Filipinos in general have very peculiar ideas of fevers. They usually roll a fever-patient in blankets and shut him up in a close hot room, because they believe that if a current of cool air should strike him, he would die instantly; a cold bath for a fever patient is considered little less than murder. For fevers in some parts of the Islands, the natives use the bark of a tree known as the andarayon; they claim that when it is made into an infusion it is superior to quinine. I cannot affirm or deny this statement because I have never seen the drug used.—*Melville A. Hays in Journal of the Association of Military Surgeons.*

Hospital Cars for Chinese Railway.—A Russian factory is building hospital cars for the Chinese Eastern Railroad. Each has compartments for the surgeon and hospital steward, disinfecting apparatus, an operating room with the requisite appliances, and in the main compartment eight beds for patients. Ten such have been delivered and fifty more are ordered.—*Railroad Men.*

Gauze Drains.—Gauze drains left in lesions have liquefied and the gauze is easily removed. In the uterus gauze should never be left in more than twenty-four hours, owing to danger of wounds should not, as a rule, be removed until the fourth day, when the asepsis.—*International Journal of Surgery.*

A Simple Method for the Removal of External Hemorrhoids Under local Anaesthesia.—Thos. Chas. Martin, President of the American Proctologic Society (*Cleveland Medical Journal*) uses two hypodermic syringes with the finest needles, having long oblique points. A 1-10 of 1-per-cent. solution of eucaine is prepared in a physiological salt-solution, which is administered at a temperature of about 98 degrees F. The integument in the proposed line of incision and the tissues beneath the base of the tumor should be rendered uniformly œdematous by the endermic injection. The oblique portion of the needle's point should be laid on the skin, which is drawn tense, and by a movement of the fingers only, the needle should be pushed steadily in till its mouth is buried in the integument. The piston is now pushed, and as the welt rises in advance of the needle's point, the needle should also be advanced in the plane of the integument. Before making the incision a row of continuous sutures should be placed in the infiltrated area around the growth, then cut and converted into interrupted sutures ,to be tied after the tumor has been dissected away.

To Preserve Rubber.—Ten to twelve parts of water and one part of ammonia will preserve soft rubber any length of time. Dip rubber pipes, etc., in a glass jar filled with this solution; it is better than a glass stopper.—*Toledo Medical and Surgical Reporter.*

Treatment of Squint.—Treatment should begin as soon as the slightest deviation is noticed, and should consist in the maintenance of fixation by bandaging or atropinizing the better eye, and by correction of all refractive errors. The fusion faculty should then be educated and when that is well developed if the deviation is not corrected operative measures should be undertaken to produce approximate parallelism of the axes, as little can be done with the fusion sense after the sixth year. This parallelism can be perfected and maintained by further fusion exercise. The amblyoscope is adapted for use in any degree of squint, and which overcomes suppression of the image by increasing the illumination at the same time amusing the child.—*American Medicine.*

Treatment of Stye.—The lash is removed from the center of the inflammatory area. The swelling should be carefully touched with tincture of iodine or pure carbolic acid. Where there is any pus it should be released by a small incision. Warm applications will lessen the pain. A weak mercurial ointment will generally cause the disappearance of the remaining thickening of tissue. The diet should be regulated when there is reason to believe that the condition is due to general constitutional atony.—*International Clinics.*

We were about to dispute with the New York professor who declares his belief that man originally was a snake. We are held up by the reflection that every man begins his career by crawling, and later in life does a great deal of wriggling in the presence of the daughters of Eve.

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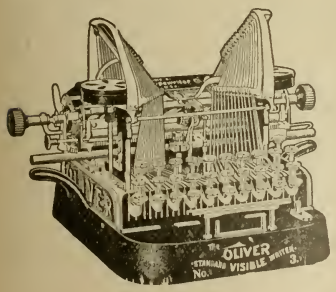
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The germ is grimly stalking like some pursuing spook!
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And when you've got 'em finished,
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Be careful of the mutton (oh! guard ye well the meat!)
It's full of varied microbes we would not care to eat!
And trace the antecedents of that seductive stew—
We know not how much danger is lurking in the brew!
Go, vaccinate the oatmeal
And sulphurize the rice—
And once again, dear sister,
DON'T FAIL to BOIL the ICE!

Ah! knowledge all upsetting! Once we were blithe and free
And didn't build our fears on microbes we couldn't see;
But science has exposed 'em, and now they're everywhere—
They're poisoning the stuff we eat, they're masters of the air!
If we neglect to heed 'em
They'll have us in a trice,
So, sister, dearest sister, after you have finished reading that romance in three acts, entitled "The Deadly Germ: or, The Scientific Solar Plexus," and after you have drawn the curtain, stopped up the chinks, sterilized the water, disinfected the cook, examined the mutton and secured the history of the stew,
GO DOWN AND BOIL THE ICE!

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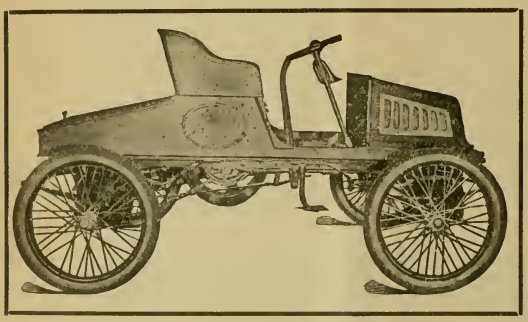
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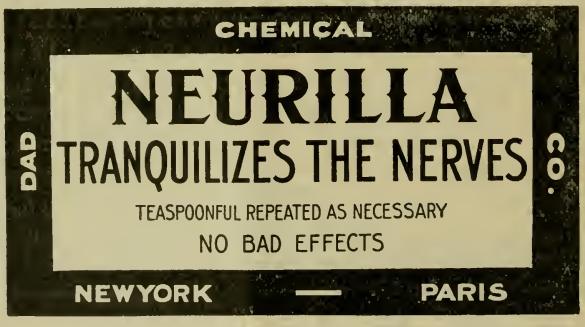
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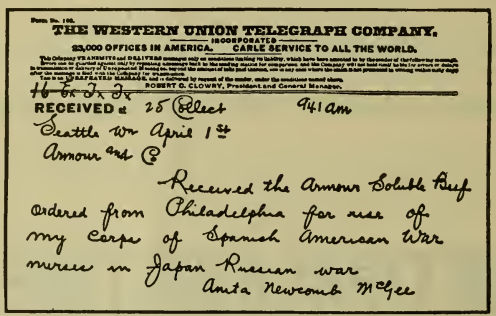
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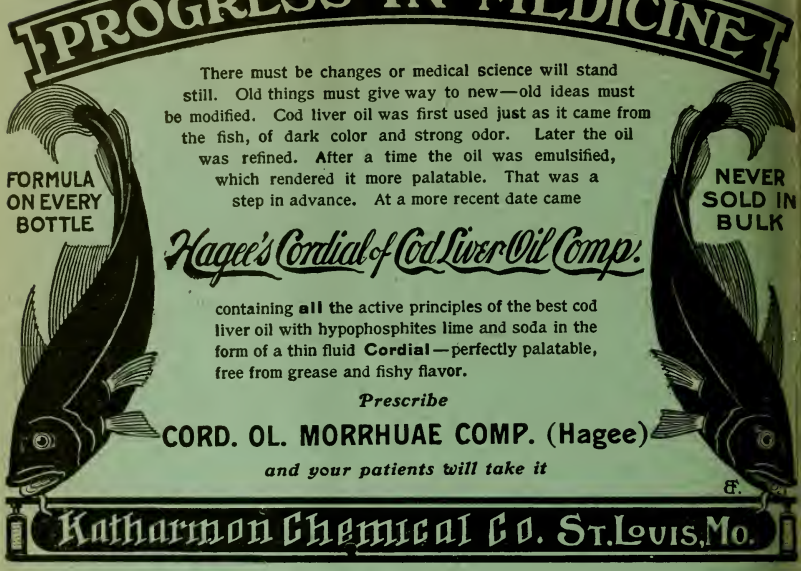
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ORIGINAL COMMUNICATIONS.

Management and Treatment of Typhoid Fever.

By R. M. Reid, M. D., Gastonia.

In dealing with this subject I shall not attemtp to go into that part of the details in the management and treatment, which are so abundantly and minutely set forth in all our standard textbooks, but shall deal more particularly with the erroneous ideas, conflicting opinions, and every day mismanagement of typhoid fever in general, as seen from the view point of accepted facts, as to its cause, course and pathology. Your selection of this subject upon which you desire a paper read this evening, that it may open up an avenue to the personal interest of every physician present, through which he can be helpful to his brother physician and, perchance himself be helped by the informal interchange of ideas and suggestions that should follow, is, I think, a happy selection; not that the paper read is expected to contain any new or startling facts, and even though it should in no particular prove beneficial or any part of it be approved or endonrsed by a single member of this association, but only as it should prove a means of provoking a discussion upon a subject of vital importance to each of us and our patients at large.

It is of vital importance for many reasons; first, because of its presence with us, its universal distribution, its former high mortality—between 45 and 65 per cent.—which has happily been reduced to between 10 and 30 per cent., and especially important to the laity, by reason of the (so-called) doctor's bills that follows in its wake. So general, indeed, in its occurrence and distribution is it, that every physician with only one year's experience is entirely familiar and conversant with its symtomatology. Second, it is a fortunate selection be-

Read before the Gaston County Medical Society.

cause of the diversity of opinion entertained as to its management and treatment, so individually diverse as to present, in many cases, an emphatic contradiction, as we will attempt to show later.

Many varied specifics have, from time to time, been heralded abroad, only to become obsolete or repulsive under the search light of microscopical pathology, scientifically applied. The number of specifics have been almost as numerous as the mortality resulting resulting from their dogmatic and uncompromising use. Water starvation, a gallon of corn whiskey, and a pint of turpentine was a specific that was prescribed for a longer period, perhaps, than any that are to follow, and still occuies an important place in the minds of the laity to-day. Next in their respective order come the following: Quinine opii and camphor, then carbolic acid and iodine, then chlorine water, then chloroform, then coal tar and antipyretics, then salol, then Brand's hydrotherapy, then guiacol, then woodbridge, then acetozone, then the last to date, serum therapy. Now, gentlemen, if this subject was of sufficient magnitude as to cause our ancestors and predecessors such mental yearning, profound thought and scientific energy in their efforts to solve it, and notwithstanding all this, still hold such incompatible views as to the treatment, and as we each and every one have the same unmodified, morbid anatomy to contend with to-day, it is not necessary, nay more, imperatively demanded of us that we of the Twentieth Century should dive deeper into the still hidden mysteries of this old and familiar disease, and redouble our efforts to still reduce its mortality?

Typhoid fever has been known as a continued fever since 1813, but not until 1829 was the name Typhoid given it and an intelligent description of its symptoms written by Louis, of Paris.

That we have a more intelligent idea as to the management, including treatment of typhoid fever, let us agree upon a definition of its etiology and pathology that all can accept, however conspicuously antagonistic our line of treatment may be. All authorities agree that typhoid fever is a specific, infectious, self-limiting condition, whose pathology is constant and always caused by the bacillus of Eberth, and that no organ or tissue of the human anatomy escapes its pathogenic influence. With this accepted hypothesis of its etiology, we will proceed to outline our accustomed management and treatment. This subject naturally and necessarily divides itself into hygienic and medicinal, as it is not within my province to deal with the momentous question of prophylaxis that rests with such responsibility, both professionally and morally, upon the shoulders of the attending physician.

Before we begin with either the hygienic or medicinal treatment separately, I desire to quote Dr. Loomis, with whose reputation as a diagnostician and pathologist you are all familiar, in a concise statement that has direct and important bearing on both. It is this: "The prominent, direct causes of death in typhoid fever are: 1. Toxemia. 2, Asthenia. 3. Suppression of excretory functions of kidneys. 4. Hyperæmia and œdæma of the lungs. 5. Intestinal hemorrhage. 6. Exhaustive diarrhœa. 7. Inestinal perforation. 8. Peritonitis, with or without intestinal perforation." Should we carefully consider these eight causes of death as laid down by him in our treatment of typhoid fever, and should we use all known means to prevent and control them separately and collectively, we would have

plnow and 'sases, and would the treatment of all cases oftentimes avoid the professional embarrassment and criticism of recognizing them in the corpse that was so recently our typhoid patient. Asking pardon for this seeming digression, we will proceed with our idea of the hygienic management. The necessity for the proverbially large, well ventilated room, divested of all furnishings and draperies is too apparent to need comment. The bed should contain a hard mattress over which is placed oilcloth and that covered by a sheet. The patient, clothed only in night dress, should be lightly covered by some washable sheet or counterpane. And just here let me urge upon you the importance of specific instructions as to the amount of covering necessary, on account of the almost superstitious belief of the family and friends that unless the patient has an oppressive amount of covering he will contract a severe cold or pneumonia, not being aware of the scientific fact that bronchitis of the initial stage, and the pneumonia of the later stage, result from conditions within and not from circumstances without. The patient's clothing and bedding should be made fresh every day—personally, I prefer having them changed every day about noon, after a hygienic bath, even when the temperature does not demand the systematic bath. The position of the patient should be frequently changed, specially important from beginning in severe cases and in last week in all cases, to prevent tendency to lung involvement. The secretions and collections in mouth and on teeth should be removed and mouth kept clean with some palatable germicide, particularly before nourishment is taken.

We have now reached the place in our paper which is the "bone of contention" among physicians—the therapeutic point, where unfortuately individual opinion, in many cases, not begotten of reason, constitutes the law of treatment, to every man his own, until by chance his opinion reverses itself. "What class of therapeutic agents shall we use in typhoid fever?" is the Macedonian cry. Shall we rely upon antiseptic, with the belief that we can destroy the bacilli and their toxins, and thereby abort or cure typhoid fever? 2nd. Shall we rely upon coal tar antipyretics, with the belief that pyrexia is the morbid condition, and that by keeping temperature reduced we thereby cure typhoid fever? 3d. Shall we rely upon purgatives with the belief that we can eliminate the bacilli and their poisons from intestinal tract, and thereby cure typhoid fever? 4th. Shall we rely upon camphor, opium and astringents, with the belief that if we control peristalsis and prevent diarrhœa and lesson tendency to perforation and peritonitis, we thereby cure typhoid fever? 5th. Shall we rely upon strychnine, digitalis and and alcohol, with the belief that by continuous stimulation we increase resisting power and prevent exhaustion, and thereby cure typhoid fever? 6th. Shall we rely upon hydrotherapy water hot, cold and tepid, externally, internally and etternally, with the belief that we dilute the toxins, increase secretions and blood volume, and supply fluid to the impoverished tissues, we thereby cure typhoid fever?

Now, gentlemen, these questions may, at first thought, appear unnecessary, extreme, and somewhat caustic, but if you will accompany many of us physicians in our daily rounds among fever cases, and observe our mental perplexity until we have decided upon our diagnosis of typhoid fever, and have prescribed our treatment of typhoid fever, because it is typhoid fever, regardless of character, symptoms and prognosis of the

individual case, you will at least admit the appropriateness of such questions, and will be forced, almost, if not altogether, to the conclusion that some one of these theories obtains. Theoretically you deny the truthfulness of this statement, but in daily practice at the bedside of typhoid fever, what routine treatment do you use? Do you give your patient a careful physical examination at every visit, note every changed condition, if necessary reverse your treatment of the previous day, discard all treatment, or make any change that looks to a more favorable prognosis; or do you only take temperature and count pulse rate and say, "patient is better to-day," or "not so well," continue same treatment, consoling yourself with the impotent and egotistic persuasion, even should your patient succumb to some seeable, though negligently unseen and unprevented condition, that you have given him in your treatment, the best treatment, and the only rational treatment? The sins of omission are as surely damning as the sins of commission. To the widowed mother, whose only son and only support is stricken with typhoid fever, the prognosis is far more important than the diagnosis, and very often depends more upon prevention made possible by a timely and skillfully made examination, than upon abundant drug medication.

Under the head of general medicinal treatment of typhoid fever, will emphatically say, in my opinion there is no specific treatment. One reason for this opinion will suffice. It is this: Unless you can destroy and eliminate the bacilli of Eberth and their toxins from the system, you can have no specific. Can this be done? Pathologists tell us that the new bacilli do not exist in bowels prior to the breaking through of intestinal lymph vessels, consequently are not in intestines until the beginning of the second week. They tell us also that the bacilli multiply in the intestinal wall, the mesenteric glands and the spleen; hence the process of their complete destruction and elimination in these locations is more than a herculean task, and can only be made possible by some substance, chemical or otherwise, whose germicidal powers are great enough to destroy the bacilli in the circulatory system without disorganizing the blood itself. At this writing no such chemical or combination of element is known to the profession. I would not have you infer from this that I oppose intestinal antiseptics in typhoid fever. To the contrary, I use them, and more, consider them indispensible to the treatment; not with the idea, however, of aborting or curing, but for the simple reason that by their use it is possible to render the intestinal contents almost sterile, and by so doing you render inert numerous pathogenic bacteria and their toxins, prevent autointoxication, and destroy a part of the typhoid bacillus, consequently you relieve your patient of that part of the double infection plus the number of typhoid bacilli destroyed. Wasden, of Marine Hospital, and others claim that it is entirely possible to make the intestinal contents sterile by the use of acetozone, and my limited experience with it in typhoid fever has been all that I could reasonably hope for. I use the initial dose of calomel, soda and guiacal carbonate in small repeated doses, until the bowels are unloaded and the secretions, as far as possible, established, followed by 5-grain doses of quinine with two grains of guiacol carbonate, in all suggestive cases, until a satisfactory diagnosis is established. Right here allow me to state that I do

not use quinine with the idea of mixed infection—the so-called typho-malarial fever of former times, for we are plainly and emphatically taught by authentic statistics that the two infections rarely, very rarely, exist in the same individual, and when they do, it is a double infection. If these statements are true, some of us will have to revise our accustomed first-sight diagnosis in the initial stage of our fevers, for it explodes the deceptive and palliative diagnosis of malarial fever and, unless we succeed in breaking it up, it runs into typhoid fever, or the reverse, make an equally previous diagnosis of typhoid fever, for vainglory reasons, and under the calomel and quinine treatment it disappears in a very few days; then we must either resort to the subterfuge of claiming to have broken up typhoid fever or admit that our diagnosis miscarried. Between the horns of this dilema we choose the "break up theory," for personal reasons.

Continuing, we believe in water in abundance, forced, if necessary, with the belief that it dilutes the toxins, flushes the kindneys, relieves thirst, and supplies to the ststem a part of the fluid used up in the fever generating process. We use the sponge bath, either tepid or cold, to lower temperature, but are not impressed with Brond's method of tubbing in cold water, on account of prejudice of patient and family, its inapplicability in general practice, with no trained nurse or skilled attendant, and most on account of its shocking effects on nervous systems and delayed reaction of patient.

In dealing with temperature, I may be considered a heretic, for I do not consider pyrexia *per se*, in all cases, the only important or even the most important to deal with. I have seen many cases, whose temperature rose above and remained above the so-called danger line—102½ or 103—for days and weeks and the patient seemingly unaffected, as evidenced by quietness, mentally, physically and circulatory, who slept, took nourishment, and whose mental equilibrium was undisturbed, and whose uneventful recovery and rapid convalescence bore unmistakable evidence of no untoward after affect. On the other hand, I've seen patients who would manifest many of the following unfavorable symptoms when temperatures reached 103: delirium, physical distress, rapid and undulating pulse, subsulstus tendium, insomnia and disgust for food, etc. Milk (sour or sweet), beef tea, egg albumen, gelatine, and liquid peptonoids should constitute the entire nourishment. In the use of milk continued care and observation should be exercised to learn that it digests, or rather that it does not ferment and form hard curds, with the following train of symptoms: abdominal distress higher fever, diarrhœa, tympanitis, etc., etc. Strychnine is my sheet anchor when a stimplant is indicated—barring hemorrhage. I must confess I rarely see indications for alcohol, and have seen it increase all the unpleasant symptoms. In insomnia, I have tried trionol, bromides, chloral, and morphia hypo., and unless there is considerable delirium, in which case I use bromides and chloral. I use morphia; and right here let me say, in a typhoid fever patient, with his mind filled with omnious apprehensions and delusions as to his condition, to such an extent that sleep will not come to rest and calm his overworked and tired brain—to such a patient in this pitiable condition, I consider morphia hypodermically a godsend in relaxing and benumbing his high-tentioned nerves and inducing sleep, which sleep is food, nutritious food, to

his exhausted mental body. On all other special conditions requiring treatment, as laid down in our text-books, I have no comment to make.

In concluding this paper, I cannot resist the temptation to reproduce the beautiful and yet distressing pen picture painted by Dr. Meigs, in a lecture delivered by him in Penn. Hospital in 1879. It is the following:

"When I stand by the bedside a severe case of typhoid fever and see the patient motionless, insensible, dead to all the usual senses of the living; when I look at his half-closed eyes, his gaping mouth, his dried and fissured togue; when I brush the unheeded flies from his poor unconscious face; and when I touch his hot and burning skin, I ask myself, into what lower estate the human body can fall. Not only has the patient lost all appetite for food, not only is he dead to all that surrounds him; but this hot and withered body, this dry and pasty mouth filled with dessicated crusts and sordes, knows no longer even the sense of thirst. This has been the last sense of which he has been deprived. So long as he retained any consciousness at all he would ask for water or for ice; now he feels not even this great want. It is in this crisis of his that he is to be saved, if saved at all, only by the constant care of his physician nurses and relatives. And woe to the physician who can look on such a sight and not yearn to know all that his art has acquired through centuries of experience and study."

The Sponge Bath in Typhoid Fever.
By H. S. Monroe, M. D. Davidson, N. C.

This is the season of the year in which typhoid fever cases are begining to attract our attention and call for our best medical skill and ability. Perhaps there is no one acute disease for which more different plans of treatment have been used; and this is due to the fact that we have not yet found a drug that will act as a specific to effect a cure, or in any way shorten or materially modify the course of the disease. Great will be the name of him who discovers a remedy that will act on the typhoid bacillus like quinine on the plasmodium malarial or antitoxin on the bacillus of diphtheria.

Fortunately enteric fever is a self-limited disease, and the grave complication are comparatively rare. If properly cared for the ordinary case will recover without a dose of medicine; while no drug or plan of treatment can save some of the extraordinary cases which to have been doomed to die. It is the duty of every physician to carefully decide for himself the treatment which he thinks will give the patient entrusted to him the best chance for resisting and overcoming the virulent attack of the typhoid bacilli after they have fortified themselves in the Peyer's patches of the intestine; for life is more dependent on the individual's vitality than on any of the long list of intestinal an tiseptics that can be administered.

As soon as a case of typhoid fever is diagnosed, the patient should be put to bed and given only a liquid diet, be it a mild or a severe attack. Next in order of usefulness is a judicious use of cold water, internally and externally. Too much emphasis cannot be laid on giving the patient plenty of water to drink, and even arousing him to take it if he is too stupid to call for it. It helps to keep the tongue moist, and assists in the elimination of the excess of nitrogenous waste products to be thrown off through the kidneys, and also the toxins formed by the disease germs themselves.

Cold water has been used externally very extensively in recent years with the most gratifying results. Brand proved by statistics from a large number of patients treated in the German army that cold water lowered the mortality of typhoid fever more than any other treatment. He introduced the plunge bath into modern practice, and the tub bath is called the Brand method in honor of his name. Dr. Wood, in his Practice of Medicine, written in 1849, speaks of the good effects from sponging typhoid cases, but to Brand is due the credit of modernizing the method and giving it the place it now holds. The Brand method of submerging the patient in a tub of water at 70 degrees F. has been the most popular in hospital work, and it is perhaps the most efficient, but it is very troublesome and requires an especially prepared apparatus for its employment, consequently it is almost impossible to use it in general practice. The sponge bath is a much more simple procedure and it gives excellent results if given in the right way and under proper circumstances.

It is a false belief very prevalent among medical men, as well as the laity, that the one aim of giving a bath is to reduce the temperature. Of course, reduction of temperature is of value in its use, but it is a thing of minor importance. The fall in our patient's temperature should be looked upon more as an indication of the good the bath is doing in other ways. The primary object should be to bring about a reaction, which results when the circulatory system responds properly to the stimulating effect of the bath. This will not be the result if the bath is given improperly or if the patient is too weak to react. The reaction is evident from the rosy tint imparted to the skin, showing that the vaso-motor system has been aroused to activity by the effect of the stimulus.

It takes some practice to get the best results from the bath, and I wish to describe briefly the method of giving it, which usually proves successful: Put under the patient a rubber sheet covered with an ordinary sheet or small blanket. Have in a bowl or tub by the bedside water at the temperature of 60 to 80 degrees F., for old or debilitated individuals; for strong, young adults or children ice water is better. (The temperature of most well water is 60-70 degrees, and of hydrant water at this time of year it ranges from 70-80 degrees.) Always put an ice cap or towel wrung out of ice water on the head to prevent cerebral congestion. With a large sponge or piece of cloth mop the water on the patient rapidly, beginning with the chest, and then taking up the limbs successively. While sponging with one hand rub rapidly and briskly with the other. The colder the water is the easier it is to get the reaction, so a lump of ice is better than the sponge if the patient can stand it. The friction with the hand is the most important element, for following the cold it brings the blood to the surface. The patient should then be turned on his side and the back and spine given a good sponging with plenty of friction. The abdomen should be very gently sponged if at all. The bath should last from ten to twenty minutes, after which the patient should be dried and rubbed briskly with a Turkish towel. Cover up with blankets and if he complains of being cold give a good dose of whiskey, but he will usually experience a sense of exhiliration and warmth as soon as he is covered in the bed. The bath should not be stopped because the patient complains of feeling cold, but

if the body surface becomes blue and will not acquire the healthy, rosy tint, or if the teeth begin to chatter, the bath should at once be discontinued and a warmer temperature of water used at the next application.

With the first touch of the cold there is a chilling of the surface, showing its effect on the vaso-motor system by causing a contraction of the capillaries with ischemia of the part, but as soon as the rubbing is applied a rosy tint replaces the palor, showing a return of the warm blood to the surface. Suspected hemorrhage and perforation are positive contraindications to the use of the bath. In most cases the temperature should be taken every three hours, and a sponging is indicated if it is over 102. degrees F. It is a fact peculiar to typhoid fever in the first week that when the bath is first given it has little effect in reducing the temperature, though it does its good in other ways and should be kept up. The system soon becomes, as it were, educated to the effect of the cold and the temperature is easily reduced from 103 or 104 degrees to 100 or 101 degrees. It is also important to remember that if the sponging is not begun till the second or third week of the attack, the circulatory system is often so sluggish and depressed that the patient cannot react, so there is always an element of danger in beginning the bath at that stage.

If our desire is to maintain the strength of our patient by keeping up his nutrition and promoting the activity of the important vital and eliminating organs by every means at our command, we will find that the sponge bath meets more of these indications than any other therapeutic measure we can employ. The reaction and increased rapidity of the pulse rate are evidence of the stimulating effect on the circulatory system. The blood, which at first rushes from the surface, soon recedes and carries back with it the excess of body heat to be taken away by the cold applications, thereby reducing the high temperature. The increased circulation in the kidneys, liver and lungs prevents prolonged congestion of these organs, and increases their elimination of the waste products and typho-toxins from the system. The nervous mechanism is also effected, as is shown by the quietude and refreshing sloop so often brought about by the bath. The water and rubbing keep the skin clean and active to perform its functions of elmination and dissipation of heat. It is also a noticeable fact that bed-sores are much less frequent, because the skin becomes toughened, and the increased flow of blood to the surface does not allow the lowered vitality in those parts predisposed to the formation of sores. If the patient reacts properly the only possible objection to the sponge bath is the danger of prodcing internal hemorrhage by the temporary engorgement of the intestinal blood vesels, but asw e have already seen, this little danger is insignificant, when compared with the good effects of *the wash and rub without the tub*

Immunity.

By Albert Anderson. M. D.. Wilson, N. C.

Infection and immunity or correlated subjects and these have interested and engaged the leading scientific minds of the past century.

What we understand by immunity is that power or ability in the human orgaism to prevent the introduction and the effects of bacterial poisons: or immunity may be the work of thesetahrd munity may be the result of the work of these bacterial poisons.

It is classified as follows: Congeni-

tal, acquired, individual or racial.

Immunity is artificially acquired by the introduction of another infection, as vaccine virus—by the introduction of cultures properly prepared for this purpose; by the introduction of serum from immunized animals. This form of induction is not as lasting as that inherited or produced by a previous attack.

The mechanism of immunity has been put upon many bases, but no basis supports the whole truth and there is some light thrown on this interesting question through all the theories, from the early one of Cheauveau down to Ehrlich's chemical affinity.

It was thought at one time that anthax bacilli killed by a mechanical plugging of the blood vessels, but soon a step was taken forward and the fact ascertained that it was the toxines that killed.

Cheauveau advocated a partial truth in stating that immunity came about by the cells of the body becoming accustomed to the presence of toxins—parallel with the well known fact in therapeutics of the increased tolerance of drugs. Pasteur, perhaps the one of all others who towered above as the loftiest peak in the range of bacteriaological workers, advanced the theory of exhaustion which has been proven by Bitter to have no evidence at all for its support. And we learn from this theory of the great Pasteur, that it is possible for the greatest to make mistakes.

To my own mind, the most fascinating doctrine is phagocytocis, the principle of which is that "the wandering cells of the animal organism, the leucocytes, possess the property of taking up, rendering inert, and digesting micro-organism with which they may come in contact in the issues."

But about four years later, 1888, Nuttall, of our country, put forth a theory involving scientific principles "upon which rests all serum therapy, that of the anti-bacterial action of the animal economy." He proved that the leucocytes did not do the work attributed to them by Mechinoff, but the serum of the blood was the germicide mainly. In the application of these principles, Behring and Roux got ahead of our countryman and produced antitoxine diphtheria, but let us not forget Nuttall, and demand for him equal merit with these two, and as a high niche in the temple of serum therapy—for he was the one who first laid deep and sure the basis of this wonderful discovery, which gives immunity and cures disease.

By those who have the best right to know Ehrlich has promulgated the workings of how this wonderful thing, immunity, is produced and made it so plain that there is no longer any use to speculate about it, and at this point I am reminded of that witty expression of the lamented Dr. O'Hagan regarding a case of smallpox: "So plain was it that a wayfaring man, though a d—n fool, could tell it afar off." But to me Ehrlick's theory of chemical affinity in both natural and acquired immunity is as difficult to comprehend as the differential diagnosis, to some doctors, between varicella and variola. I quote: "In natural immunity the cells of the animal organism do not furnish side chains capable of forming a chemical union with the toxin. Acquired immunity is due to the over-production of receptors by the cells of the body. Those which are produced in excess of the requirements of meeting and counteracting the toxines present are thrown off into the circulation and remain ready to combine with any toxin

having the same affinity that may thereafter be formed or gain entrance to the body." Antitoxins of diphtheria, tetanus, bubonic plague and streptococcus infectoins are sera which have done the most valuable service.

It is known that antitoxin may disappear from the blood without necessary loss of immunity, and death may occur while the blood is saturated with antitoxin. It is only a neutralizing agent, not one of regeneration. By it the body is able to resist and counteract infection and only in this way assist in restoring the body to health.

As stated above, Ehrlich, to me, is hard to understand, and I wish to quote Behrings definition of his antitoxic theory. "The same substance, which, when incorporated in the cells of the living body, is the prerequisite and condition for an intoxication, becomes the means of cure when it exists in the circulating blood."

Of all the sera, that for diphtheria has given the most brilliant record, having reduced the mortality from 40 to 15 per cent. That for tetanus has not given the desired results. That for streptococal infection acts well in one but not in mixed infections. Those for typhoid and pneumonia are in the experimental stages.

The anti-plague serum has greatly reduced the number of cases and mortality from 33 to 13 per cent. Mixed infections is the great obstacles to overcome and it has been suggested to determine the mixture and use the sera accordingly.

After selecting this subject I almost dispaired of preparing a paper until I saw our program, and there I learned that Dr. Faison was coming with infection, and that I had to prepare an immunity for my fellow co-laborers at this meeing, to counteract, perchance, some fatal toxine infection that the Dr. might bring. So rest assured I'll protect you so far as I can.

Immunity! what a blessing!! In epidemics of smallpox, measles, scarlet fever, diphtheria, typhoid fever and others, we appreciate the value of immunity natural or acquired, individual or racial, and to obtain this inestimable blessing is the end to which we must attain by any or all means—money, time, labor or sarifice.

So let the profession say to the scientific seachers after remedies conferring immunity upon the human race, labor on at last at our expense till they are found, and we will place you in the gallery of immortelles—Jenner,, Pasteur, Nuttall, Behring, Raux, Ehrlich and others. So I would request the author of infections to join with me in conferring immunity and thus increase longevity and happiness by the conscious security and integrity conferred by this wonderful quality.

I have not undertaken to spread before you the different theories of my subject in detail, as promulgated by Metchinkoff, Cheaveau, Ehrlich and others for this good reason: I do not fully understand them, and I refer you to the standard books for explanation and content myself in saying to you that immunty from infections is the greatest thing the body can possess.

Hard Luck.

"Did you call at Roxley's house?" inquired the young doctor's wife.

"Yes; and I wish he had sent for me sooner."

"Gracious! Is he seriously ill?"

"Quite the reverse. I'm afraid he'll be all right again before I get in a half dozen visits."—*Philadelphia Public Ledger.*

ABSTRACTS.

Antitetanic Serum as a Prophylactic Against Tetanus.

It has been shown that guinea pigs, and other animals inoculated with the poison of tetanus, survive when treated at once with antitetanic serum. In France, Nocard observed 375 animals of various kinds, all of which had been wounded, accidentally or surgically ,and subjected to tetanic infection. These animals were given antitetanic serum at once, before the disease had time to develop. As a result, not a single case of tetanus occurred among them. On the other hand, he noted fifty-five traumatized animals that had been exposed to tetanic infection, every one of which developed the disease.

In the August, 1899, number of *Medicine,* Prof. George F. Butler, M. D., says: "Dr. Joseph Hughes, one of the most eminent and conservative veterinary surgeons in Chicago, has used the serum as a prophylactic in over 500 cases following wounds, both surgical and accidental." Not a single case of tetanus has developed, though Dr. Hughes has used the serum where, by former experience, he was justified in expecting the disease to manifest itself.

From this and similar reports it has been proposed to immediately inject antitetanic serum in every case of traumatism of a suspicious character, hoping in this manner to prevent the subsequent development of tetanus. The serum is harmless to man and may be given hypodermatically as the other serums. Nocard recommends that a first injection of ten cubic centimeters should be made as soon as possible after traumatism. A second injection should follow in from twelve to fifteen days.

It has been suggested to inject prophylactically all new-born infants in certain sections of Europe in which trismus neonatorum prevails.

In the *Therapeutic Gazette* for February 15, 1903, the editor directs attention to the fact that "although tetanus is, comparatively speaking, a rare disease, it is sufficiently frequent and fatal to make an antitetanic serum a much-sought-for remedy." He also pointed out the fact that the failure of antitetanic serum depended "not upon the fact that it was possessed of no virtue, but rather because it was used too late to combat the disease." The same writer expresses the view that, "one fact stands out above all others, and that is, that thoroughly good results cannot be expected from antitetanic serum unless it be given in the very earliest stages of the infection. So true is this that experienced observers have insisted that its best results can be obtained only when it is administered immediately after exposure to infection, without waiting until the micro-organisms have had a chance to develop in the body and produce early symptoms of poisoning."

The editor of the *New York Medical Journal,* in the issue of March 26, 1904, remarks that "the present drift of opinion seems to be to the effect that tetanus antitoxin, while probably of considerable prophylactic efficacy, is of little use as a curative agent."

At a meeting of the Paris Society of Surgery, according to the same editorial, M. Labbe expressed the view, that since the injection of antitetanic

serum has been employed as a routine prophylactic measure, the disappearance of tetanus after surgical operations in horses was a prime fact in support of its preventive efficiency.

Furthermore, recent experience in the immediate topical employment of antitoxin cases of toy-pistol injuries appears to support our trust in its prophylactic value.

Bazy (*Bulletins et Memoires de la Societe de Chirurgie de Paris,* 1896, N. S., XXII., 186, 191) had four cases of tetanus develop in his wards. From that period he applied preventive treatment to all case of wounds admitted to his service. He made twenty-one preventive inoculations of ten cubic centimeters each. None of these patients develop tetanus, although he says their wounds belonged to that category which includes most cases of the disease.

Dr. Joseph McFarland, in the *Journal of the American Medical Association,* for July 4, 1903, reports the results of a series of observations upon 800 horses which illustrate the value of antitetanic serum as a prophylactic agent. During a period of four years there had been a death rate of 10 per cent. from tetanus, in spite of all precautions. A systematic immunization with antitetanic serum was then begun. Injections of 10 to 25 CC of serum were given every three months. As a result, the death rate from tetanus rapidly decreased, and in the second year had been reduced to less than 1 per cent. The author believes that the practical conclusions to be drawn from these observation may be applied to the human subject. He thinks that antitetanic serum should be given as a prophylactic measure in all cases of suspicious wounds that are likely to be followed by tetanus.

Experiments made on guinea pigs by the author demonstrated that the dried serum fully protects inoculated animals.

At the twenty-ninth annual meeting of the Mississippi Valley Medical Association, held at Memphis, Tenn., October 7, 8 and 9, 1903, Dr. S. C. Stanton, of Chicago, contributed a valuable statistical paper on "The Prophylaxis of Tetanus" (the *Medical News,* October 31, 1903, page 860). Among the various prophylactic measures recommended by the anuthor were the open treatment of all wounds, however insignificant, in which, from the nature or surroundings, there was any risk of tetanus—the immediate use of antitetanic serum in all cases of Fourth of July wounds, wounds received in barn-yards, gardens or other places where the tetanus bacillus was likely to be present, or tetanus infection to occur.

Management of Typhoid Fever.

Henry Boates, Jr., M. D.
(*Therapeutic Review.*)

All treatment claiming specific value should be discarded. We know the cause, are unable to fully control it, and must direct efforts to skillfully managing the conditions.

The application of germicidal antiseptic principles should be applied to every thing used or possible of contamination.

Diet and digestion should receive careful consideration, and each case treated individually. Nutriment giving the minimum of residerum is one object to constantly bear in mind. Eggs, puru of peas, junket, jelly, minced and properly seasoned meat, in one ounce quantities, two or three times daily are permisible at all periods.

Pyrexia is a symptom of improper nourishment, and frequently the obstinate temperature curve will assume normal characteristics of a proper supply of

food be given.

Medicines should be administered for their effect upon the whole system after an intelligent review of the conditions presented, rather than for isolated symptoms.

In headache, study the circulatory system, chloral and morphia properly combined are often useful. Distressing delerium, fear and incoherent speech is best controlled by hypodermic of morphia. Trional, phenacetin, etc., should be used only after careful study. Insomnia can be controlled with crystaline acconitia, in doses of 1-250th gr. It allays cerebral excitement, obtunds the exaggerated reflexes, reduces temperature, softens and moistens the skin and calms the patient. *It is dangerous in the hands of* an incompetent—nausea and vomiting, diarrhoea and constipation, tympany, etc., require treatment as the associated conditions indicate.

The widest range of therapeutics exists in combating temperature. Cold tar derivatives are to be avoided and cold in bath sponges, etc., used with care. The minimum of physical disturbance should be the guide and moderation observed with any means employed.

(1-100 gr.) can be advantageously used throughout the disease, argenti nitras and bismuth, with or without opium are of advantage for the lesion. For hemorrhage, the hypodermic use adrenalin chloride, is useful, as a nerve tonic, phosporus and caffine are useful. Digitalline is used for vaso-motor stasis, venous hyperaemia, and cynosis, as shown by blueness of finger nails.

The serum treatment has not proven efficacious.

The hygiene of the mouth and nose requires daily attention.

DIET IN TYPHOID FEVER.

Shattuck (*Med. Brief.*) has enlarged the diet of his typhoid patients for the past ten years, with a reduction of 1.5 per cent., in the mortality, advantage of patients being more comfortable and happy, convalescence shortened and relapses less frequent. Patients with weak digestion are confined to liquid diet, but unless there is a digestive trouble the following diet is allowed:

1. Milk, hot or cold, with or without salt, diluted with lime water, soda water, apollinaris, Vichy; peptogenic and peptonized milk, cream and water (*i. e.,* less albumin); milk, with white of egg, slip, buttermilk, koumyss, matzoon, milk whey; milk with tea, coffee, cocoa.

2. Soups: beef, veal, chicken, tomato, potato, oyster, mutton, pea, bean, squash, carefully strained and thickened with rice (powdered), arrowroot, flour, milk or cream, egg, barley.

3. Beef juice.

4. Gruels, strained cornmeal, crackers, flour, barley-water, toast-water, albumin, water with lemon juice.

5. Ice cream.

6. Eggs, soft boiled or raw egg-nogg.

7. Finely minced lean meat, scraped beef. The soft part of raw oysters, clams. Soft crackers, with milk or broth. Soft puddings without raisins. Soft toast without crust. Blanc mange, wine jelly, apple sauce and macaroni."

Typhoid Fever.

Paper and discussion at the April meeting of Roswell Park Medical Club.

(*Buffalo Medical Journal, May,* 1904.)

Bagley (author of paper) says over 100 names have been applied to this disease—the term typhoid being given it by Louis in 1829—and means stupor from fever. Spigelius discovered the intestinal lesions in the 17th century. The distinction between typhus and typhoid was discovered and first made known by two American physicians, Gerhard and Pennock, of Philadelphia,

in 1873. The bacillus of Eberth, the existing cause is about one-third the diameter of a red blood corpuscle, rounded at one or both ends, with a round shining body in the center either a sphere or a degenerative alteration in the protoplasm. They have been known to live in milk thirty-five days and in butter twenty-one days. They have been known to live in the human body fifteen months after convalescence. They are destroyed by exposure to twenty minutes mosit heat or to sunlight. Frost and ice fail to kill them. It is not contagious in the ordinary use of the term, and there are no exhalations from the lungs or skin which impart the disease. It is infectous, the poison being usually found in the stools. A dried discharge from the patient floats upon the air and breathed into the lungs of another may convey the disease. Period of invasion is about two weeks.

Complications are frequent, the most serious being perforation of the intestine, in 2 to 3 per cent., and is a common cause of death. Other complications, venous thrombasis, falling of the hair, hepes libiallis, pericarditis, endocarditis, myocarditis, valvular trouble, ænemia, rupture of the splene, necrosis of the nose cartilage, odeme of the glotis perichondritis, bronchitis, lobar pneumonia, pulmonary odema, pleurisy, acute milary tuberculosis.

Prognosis is difficult. It is less fatal in children and increases in fatality after the forty-fifth year. Unfavorable in intemperate, gouty, venereral subjects, and pregnant women.

Colt in discussing the subject said that we would find more lesions of the throat and laryn if they were looked for, as post mortem examinations showed them present in 17 per cent., and lesions of cricoid cartilage found in 80 per cent. "Epinger considers ulcers of the mucus membrane of the throat and larynx analogous to lesions in the intestines, and that whenever there is adenoid tissue, infiltration takes place and it breaks down. These typhoid ulcers are very characteristic in location, being found on the pillars of the fauces and on the laryngeal border of the epiglottis; in the aryepiglotic folds; seldom, yet occasionally, in the subglottis; very rarely if ever on the vocal chords. A condition has been described as diphtheritic typhoid in which a diagnosis of diphtheria and typhoid has been made. It is considered to be due to deep ulceration with membrane formed over them. Another condition worthy of note, where there is no particular lesion is dry mouth, the tongue being dry and hard. The temperance cannot be gotten in the mouth, or appears subnormal, while quite apparent if taken per rectum.

Dr. Potter says viable germs have been found in abscess about the gall bladder fourteen and one-half years after recovery from the fever, and in bone lesions as late as six years. Perforations are the cause of death in 6 per cent. of the mortality. Usual symptoms of perforation are shack, sudden pain, vomiting and occasionaly fall in temperature. The death rate of perforation 95 per cent. Operation should be advised when diagnosis is reasonably certain and condition of patient will justify it. As a rule the best time for operation is during second twelve hours. Mortality under operation is reduced to 80 per cent. Hepatic abscess as a complication is rare, and surgical intervention gives but little prospect of recovery. Abscess of gall bladder is more frequent, and operations should be considered if there is distension and if ruptured an operation should be made at once. In threatened gangrene tone up

the system, and keep up the blood supply to the part. If it can't be prevented, apply antiseptic dresings, and remove dead tissue. If an extremity operate as soon as line of demacation is formed.

Intestinal Perforations.

D. Byron D. Davis calculates (*Journal American Medical Association.*, May 21, 1904) that the lives of 8,333 persons in the United States might be saved every year by a timely operation for intestinal perforation in typhoid fever. The majority of the operations so far undertaken have been for peritonitis rather than perforation. If performed early enough 50 per cent. of the operations ought to prove successful. He would not wait for shock longer than time to prepare for the operation, as the spreading infection of the peritoneum is more dangerous than the operation. He had rather operate for perforation without general peritonitis during shock, than for general peritonitis without shock.

The most marked symptoms of perforations are abdominal, sudden, intense, or an already present pain much increased, and persistent generally at or near the umbilicus—a fixed local tenderness below level of umbilicus, more often on right side—thoracic breathing, and muscular rigidity. Shock may or may not be present, more often a slight sub-normal temperature, and sometimes there is obliteration of liver dullness. Not much dependence to be placed on leucocytosis. Rise in blood pressure may in the future prove a valuable sign in diagnosis of perforation.

Every physician with a case of typhoid should keep constantly in mind the possibility of perforation. A surgeon should be called and an operation performed as soon as it is fairly certain that there is a perforation.

Typhoid Perforation.

Frank (*Bufffalo Medical Journal*) believes that one-half of the cases of perforation can be saved by proper surgical intervention. Without it practically all perforations cause death. It is therefore important (1) to make a correct diagnosis of perforation and (2) then give patient the advantage of proper surgical assistance. Early recognition and proper assistance go hand in hand. The important symptoms of perforation, are pain, tenderness and rigidity. Pain in the belly especially in the right illiac region coming on suddenly or sharply, during the course of typhoid, either in the first or consequent weeks and not relieved after an enema or spontaneously in a very short time is a most grave symptom and usually means something. Should this be accompanied by tenderness in the same region, and should there be rigidity gradually extending over the abdomen, the diagnosis, even in the absence of all other symptoms should be one of probable perforation. Shock cannot be depended upon as a symptom and must be disregarded in deciding an operation. Morris advises the physician to keep in touch with a surgeon in all cases of typhoid fever, in order to have his early assistance if needed. The best time to operate is within the first 12 hours, the next within 24 hours of the perforation. After 36 hours all cases die either with or without an operation.

The following summary is added:

1. Perforations are to be expected in about 2.5 per cent. of all cases of typhoid fever.

2. Prompt surgical intervention is the best and only logical treatment.

3. Early diagnosis is most desirable and wil be the means of greatly reducing the mortality, as 55 to 60 per cent. would recover.

4. Diagnosis, sufficiently early to achieve these results, can only be made by careful watching, treating all cases as serious and a proper interpretation of the symptoms. At the first indication have the surgeon in consultation and be prepared to operate.

5. More cases die from delay than errors in surgical technic, therefore in doubtful cases, though a mistake may be made and no perforation found, operate.

6. No case, unless dying, is so desperate as to be beyond some hope of saving, so in operating be rapid, lose no time in fancy work or in surgical refinement and be sure to drain.

7. "Get into the belly quickly and get out more quickly."

Management and Treatment of Typhoid Fever.

(*Hot. Springs Med. Jour.*)

Le Fevre states that it is often of value to review our therapeutic beliefs and measures, and see if they have kept pace with the advances in bacteriology and pathology, or whether we have fallen into a routine method of treating our patients as soon as the diagnosis of fever is made. That in our treatment we too frequently lose sight of the fact that typhoid fever is a general infection and that the bowel lesion is not the prime factor and may be entirely wanting.

Everyone concedes that more lives are saved by good nursing than any other part of the treatment. If the patient cannot be taken to a hospital and cannot have trained nursing, then it is our duty to see that it is not done by the family and friends indiscriminately, but that certain members should be assigned to this duty and should be relieved from all other household cares. The room should be sunny and well ventilated. The bed should be protected against soiling, and if possible the room should contain two beds, so that the matresses and coverings of one may be sunned each day. It should be recognized that there is greater danger of contamination of the food, etc., from the urine than from the foces.

He lays down the following rules in regard to the diet. The diet should be (a) liquid, (b) easily digested, (c) easily absorbed, (d) the unabsorbed portions or residue by the time it reaches the ileum should not contain any solid particles, (e) the food itself or its residue should not too readily undergo purefective or fermentative changes, (f) it should contain all the ingredients necessary in normal relative proportions (g) it should be relished by the patient, or, at least, should not cause disgust or nausea.

He states that milk is considered the orthodox food in typhoid fever. But that under an exclusive milk diet of 60-70 ounces a day our patients are overfed and undernourished. That while taken as a liquid it forms curds in the stomach which are often passed as hard masses in the focces. That under an exclusive milk diet the stools are larger and contain more undigested food than with a mixed liquid or semi-liquid diet containing the same amount of proteids, carbohydrates and fats. Many patients cannot take milk at all as it causes epigastric heaviness, pain, pyrosis eructation and abdominal distention. Post-typhoid sepsis and thrombosis are not so apt to occur under a mixed diet. He never gives during the early weeks any food which cannot be passed through a fine wire sieve. He gives not more than two pints of milk a day—grated stale bread or some of the farinaceous baby goods may be added. Koumis or junket may be given

Soups of oatmeal, rice, wheat, barley, tapioca or sago either alone or with bullion. These with egg-water and gelatine compete his diet.

Besides giving a daily enema he gives an occasional small dose of caster oil in an elastic capsule either alone or combined with five grains of salol. He uses few intestional antiseptics and combines hydrotherapy and small doses of acetanalid and quinine to control the temperature. The dissents from the present too prevalent plan of giving strychnine and alcohol in heroic doses from the beginning.

The Sources of Infection in Typhoid Fever.

Walsh, in a discussion on typhoid fever before the American Medical Association, session of 1903 (*Jour. A. M. A.*, Jan. 9, 1903) stated that a distinguished sanitarian had said: 'When some body had typhoid fever, some body ought to be hung.' This is a forceable way of saying that typhoid fever is a preventable disease, a fact recognized by the better informed and more progressive part of the profession for some years past, but not acted upon to the fullest extent by any and to only a limited degree by the larger majority of the profession.

The dictum that every case of typhoid fever comes in some way from a case of typhoid fever some where needs to be thoroughly instilled into the minds and consciencies of the profession and the layity. Some one needs to be held as culpable for the spread of typhoid fever from a given case as is the obstrician for the occurrence of puerperal sepsis when he has full control of the lying-in woman.

To fully cope with the different problems prevented in the subject the first consideration is the recognition of every case of typhoid fever occurring. It is a lamentable fact fully brought out by the wide spread epidemic of typhoid fever among the troops in the Spanish-American army, and the report of the commission appointed to investigate it, that a large percent of the typhoid fever occuring in both army and civil practice goes unrecognized as such variously estimated at from 40 to 65 per cent. of all cases. This seems a very high estimate, but the recorded facts bear out the statement, and an analysis of the condition or causes for our failure to properly diagnose the fever will not be atempted in this connection.

It clearly follows that one of the most prolific sources of contagion is in these unrecognized cases. Though the case may show very few diagnostic symptoms of typical enteric fever, the presence of the bacillus of eberth in the dejections is a menace to the neighborhood, unless it is recognized and properly treated. In considering these cases it will not be amiss to act upon Osler's advice, to consider every case of continued fever, north of the Mason and Dixon line, as typhoid when it does not yield quinine in six days, and even though the observation may be below this line the necessary precautions against the spread of an infection should not be neglected.

To much stress has been and is now being laid upon typhoid fever as an infectious rather than a contagious fever. Both physician and layity realize very fully the importance of effort in the hygiene, isolation and care against infection in contagious disease, but are careless on these points in the presence of typhoid fever. Because it is infectious, and must be conveyed by the bacillus entering the alimentary canal, due care against its spread is not observed, certainly not the same vigilance

as is exercised in the diseases known as contagious. There is no doubt that this carelessness is the cause of many cases, since neither patient, nurse or doctor is fully alive to the responsibilities of the situation.

Direct contamination may be the cause of a few cases of the fever according to Osler. This cause as a source of infection is very small indeed, and practicably it may be ignored.

The alimentary canal of man is the natural home of the bacillus typhosus or bacillus of eberth and it is only here that it thrives fully. It may live in other mediums for a long while, and occasionally even propigate under favorable circumstances, though this is rare. The length of time it is capable of remaining without the body and then producing an infection is not fully known, the point to be remembered is that it is a virile for some weeks, and is to be controlled.

We are accustomed to seek for the source of contamination first in the drinking water, and while this is admitted to be the means of conveyance in the majority of cases, it is by no means the larger percent. Water is not the habitant of the bacillus, and it does not live long in this medium, and does not thrive at all in it. To infect it is essential that large numbers of bacilli reach the alimentary canal, in an active state and in water there must be great contamination, or then there will be large dilution.

While water is one of the sources of contamination, it is more often the scapegoat, for want of proper care in investigating for the cause.

Want of care in handling the patient, and the soiled bedding and clothing is a very prolific cause of infection. Even when there is due care taken of the excreta, unless a trained nurse is in charge it is difficult to get proper care of the bedding and clothing.

The dried excreta in the form of dust has been given as a cause and with much plausability, too.

Milk has long been recognized as a carrier of the bacillus, as have oysters, and vegetables that are to be eaten raw. Flies and cock roaches by becoming smeared with the fucal matter from a typhoid patient and then lighting upon food that is to be eaten are without doubt carriers of the infection, though hardly to the extent that is placed against them.

The Serum Treatment of Typhoid Fever.

The serum treatment of typhoid fever has not been productive of results first anticipated and its use has not become general. Several observers have condemned the plan as unreliable and unsatisfactory, while others speak well of it

It should be remembered that this is yet in the experimental stage, and there are many details yet to be worked out before a safe and reliable formula for its use can be promulgated.

According to the evidences presented by the reports of the use of the serum in the English army in India and South Africa, it was beneficial both as a prophylactic and in a smaller death-rate as compared with the unvaccinated. The statistics of its use in the hospitals of Paris indicate a considerable reduction in the fatality of the disease.

An Unappreciated Source of Typhoid Fever.

Barringer states that a call to look after a typhoid patient, on a railway train, who, in the language of the patient, had been on the stool for a hundred and fifty miles, first drew his attention to the

infection of the road-bed of our American railways through the discharge of typhoid patients traveling over the road while in the infective stage. The death rate in the United States from typhoid fever is 46.2 per 100,000. In Europe the cars have few or no closets the death-rate is 18. That it is too much to believe that all the difference is due to the peripatetic closet, but if the closet were abolished he believes there would be close approach to their figures. A large number of typhoid fever cases travel either in the beginning of the attack or in the equally dangerous convalescent period. The road-beds furnish a constant and growing source of infection which is drained into the wells and springs along the roadway and into the water supply of towns and cities. During the dry weather, as found in August, September and October great clouds of dust are raised by the passage of the trains. He reports a number of cases which are termed travel cases and which he believes to be caused by the inhalation of dust by passengers and trainmen. He finds that there are a large number of cases among railroad employes and that nine-tenths of the cases are among the track hands who come in direct contact with the infected material and dust. As a remedy he suggests the use of a retention closet—which could be emptied at a convenient place at the end of the run.

The Specificity of the Typhoid Bacillus.

In an editorial in the *Journal A. M. A.* it is stated that although at the present time we are generally ready to accept without question the idea that the typhoid bacillus is the sole cause of typhoid fever, because of the enormous amount of evidence of various sorts that has accumulated pointing to this view, yet there has been one weak point in the evidence. The first two of the postulates of Koch have been abundantly satisfied, namely, that the organism must be found constantly present in the disease, and that it must be recovered in pure culture from the diseased tissues. The third requirement, that the germ produce in an experimental animal the same leisons as are characteristic for the disease in man, has been the stumbling block. Inoculations in animals produced degenerative changes in the organs, swelling of the lymph glands, and sometimes of the intestional follicles, but it can hardly be said that the characteristics of typhoid in man were reproduced. Grumbaum recently inoculated four chinyanzees by feeding them pure cultures. Two were killed on the twelfth day and the characteristic lesions found. The blood also gave the Widal reaction in dilutions of 1.80. The animals did not sem much sick and the two that were not killed did not suffer severely.

Oysters and Sewerage in Narragansett Bay.

The Providence Medical Journal contains an elaborate study, by C. A. Fuller, Ph. D., of the contaminated waters of Providence River. The investigation was limited to the search for a single organism, the bacillus coli communis, and the report shows its presence in the river for six or seven miles below the outlet of the main sewer of Providence. A considerable part of the leased oyster ground in Providence River lies within the zone of possible infection from foecal organisms.

Before he began the investigation he made 250 examinations of oysters growing in water known to be free from contamination of any kind, to determine if possible the forms which are normal



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habitants of oysters. The result of these examinations indicate that the bacteria found in uncontaminated oysters are essentially common water forms. Whatever bacteria are present in the water in which these shell fish live will be found in the liquor contained within the shells of the molluses. The stomachs of many specimens were sterile though in every case the intestines had large numbers. No form resembling bacillus coli was found.

He states that the results of the examination of shell fish from a given section of Providence River agree strikingly with the results of the analysis of water samples from that section of the river. Nearly every sample of water taken within a mile of the sewer contained bacillus coli. Clams, oysters and mussels from this section of the river contained this organism within their shells. Further down the river the number of bacilli gradually diminished until at seven miles from the mouth of the sewer B. coli were found occasionally in the water and in one oyster. Beyond seven miles the tests were negative.

Student—"Doctor, what do you think of problem novels?" Doctor—"I am recommending them instead of the city directory for insomnia patients."—*Cleveland Leader.*

Reports from India show that plague is greatly on the increase.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., JULY, 1904. No. 7

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

The Fourth of July and Tetanus.

The large number of cases of tetanus following wounds received on the fourth of July in our efforts to properly (?) celebrate the day cause us to approach the day with many misgivings. The deadly toy pistol and the blank cartridge, are accountable for a very large number of deaths from tetanus. According to the *Journal A. Med. Association* (Aug. 29, 1903) the known and collected causualties in the United States from the celebration of the fourth of July in 1903 were: 3,983 injuries, 406 deaths from tetanus and 60 deaths from other causes, with only 7 recoveries from those attacked with tetanus, a mortality of 95 per cent.

The blank cartridge is responsible for by far the largest percent of these cases, though Eisendrath (*Jour. A. M. A.*, May 14, 1903) shows that there is no tetanus bacillus on the cartridge itself. All irregular wounds of exposed parts of the body, those with rough edges, that come together and seal up the *debris* within the wound, are equally as dangerous. The bacillus is in the dirt and dust of the roads and streets, and especially abundant in horse dung on the premises or roadways. This accumulates on the face, hands and feet of the small boy, moist with the perspiration of the summer day, and is carried into the wound, and unless the first treatment is thoroughly asceptic, it is there sealed up under most favorable circumstances for its growth and dissemination.

Our treatment of the present day is of no avail and every suspected case or even where there is suspicion or fears of the presence of the bacillus, prophylactic measures should be instituted from the beginning. Eisendrath (loc. cit.) gives the following rules:

(1.) Early and thorough exposure of every portion of the tract which has been infested by the blank cartridge or instrument which caused the punctured wound, retracting the edges, so that the disinfection and removal of the infected material can be done under the guidance of the eye.

(2) Prophlactic injections of tetanus antitoxine to aid the organism, in com-

bating whatever toxins may have been absorbed prior to the time of operation.

(3) This thorough disinfection can only be carried out under anaesthesia, general or local, and when the parts have been rendered bloodless by the applications of a constrictor.

(4) The blank cartridge itself does not contain tetanus bacilli, but undoubtedly carries them in while penetrating the skin.

(5) The instruments which cause punctured wounds either are covered as described above with tetanus bacillus or the manure of horses, etc., and are thus carried into the wound.

(6) Our only hope of reducing the high mortality of tetanus is in the application of such radical measures as has just been described.

Most authors are agreed that the use of serum for tetanus offers but little if any advance upon treatment heretofore adopted, after the tetanus is fully developed. Blumenthal, quoted by *Therapeutic Review,* (Vol. 1, No. 6) says that injections will not neutralize the poison absorbed by the cerdro-spinal system. This must be neutralized by intradural injections, and directly into the nerves. Subcutaneous injections are useful only when the toxins are in the circulation.

While the anti-tetanus serum has no curative value, as a prophylactic there is reason to believe it is highly beneficial. It is harmless if there is no bacillus present, and as a precaution should be administered in all suspicious wounds. It is prepared under the same principles and in the same manner as the diphtheritic serum, and its dose is 5 to 10 c. c.

All suspicious wounds should be treated by the open method with thorough antiseptic precautions. Chloral and morphine offer the best means of controlling the convulsions. Mathews (*Jour. A. M. A.,* Aug. 29, 1903) suggests a plan of treatment which he calls "cell catharsis." The solution is made as follows:

Sodii Chloridi, gr. 55.5.
Sodii Sulphatic, gr. 155.
Sodii Citratis, gr. 51.
Calci Chloridi, gr. 2.
Aguae, pints 2.
M—

This is to be injected intravenously, very slowly—1 dram a minute—one first at each infusion and twice in the first 24 hours, and once in each succeeding 24 hours.

Advice to Young Doctors—Opening and Furnishing an Office.

The location you have selected for the practice of your profession will have much to do with the character and style of office you will need It may carry with it too, the office you should occupy. In choosing an office, you should consider your own convenience as well as the convenience of the class of patients you seek. A place off from the principle streets, if in a city, but still contiguous to one of them is more desirable than an office opening on a crowded thoroughfare. The "pick-up" practice may be a some better on the well-traveled street, but this is but a small inducement for the disadvantages of the noise and confusion incident to such a location. A young doctor must read and study every spare moment, and should have as few hindrances as possible. An office on a side street invites the more timid class of patients to visit you for consultation. Its location will become known with but little effort on your part, and the majority of patients would prefer a quiet street. In a country practice this is not so essential; indeed it may be better to seek some publicity in locating the office.

If a married man, the question of having an office in connection with your residence may be considered; If unmarreid, the question is still with you as to having your sleeping apartment in connection with your office. In either case, the plan has many desirable features. The economy of the combination of office and residence will commend itself, in many instances, as an office in the business portion of a town usually rents at a higher rate than the same accommodation in the residence section. If it is desired to spend much time in study the plan is especially to be commended, provided, of course, that you are able to control interference with your reading by members of your own family. There will be many odd moments that could be profitably spent in the office, that would not be utilized if it were necessary to go even a short distance to reach the office. The few minutes spent in going to and from the office is a small matter when only one day is considered, but it is of considerable importance when it comes regularly day after day. Penuriousness is not be commended anywhere and in anything, but an important lesson for the young man to learn is economy in time. There is but one place to seek you in an arrangement of this kind, and it is easier to hold your calls in case of absence, as it is generally considered that a member of your family or household will take more interest in your work. A doctor's office should be neat, and if he can interest his wife in the matter of keeping it so, it will be an advantage, both in the appearance of the office and a relief from something of a burden to him.

In the long winter nights you will feel that it is an absolute necessity that you spend a few hours with your books or journals, and it is better that this be in the office. While you may not need it every time, most, if not all, of your study will be the better performed in your office and convenient to your library. A point to be elucidated by one or more references to other authors, a word encountered in your reading not fully understood, a note to be dotted down under the proper heading--all these and many more make it desirable to use your office for study. The wife and the babies think they need you too, or perhaps it is the newly made bride that feels that apparent neglect of your absence, and then it is that the office at the residence is a real convenience. Oh, yes, it is certain you will not do quite as good work, for the wife with her book or fancy work on the other side of your study table must interpose a remark occasionally, but the pleasure you will give her by your presence will compensate for the loss of time and interference in your work. If she is a reasonable and a sensible woman, and a doctor ought not to marry any other kind, she will see the necessity of interfering as little as she well can.

In a country practice the office can be arranged in the house, or perhaps as well, in the yard, and connected with the house. This is often a desirable plan in small villages or towns.

In large towns and cities there is nearly always a centrally located office building. If the doctors generally or even a fair proportion of them make use of these rooms, it is a matter of policy to open an office there, for there is much advantage to be gained by such a course in many ways. The association with the others will make it more pleasant especially if the fraternal relations are cordial. It is a matter of policy to be near your closest competition, and a person starting out to look

for a doctor will generally seek him in such a building, if there is one convenient.

The size of the office and its furnishings will depend largely upon the means to be spent upon it. Remember that wherever you are and how small your means, that an office is essential. You must have a place of privacy, both for your own work and for the benefit of your patients. Form your plans *now* as to how much of an offifice you want, and if not in a position to reach it at once, work up to those plans. Make it to suit tne practice you propose doing, with all the conveniences necessary to the work well. Your means may not allow more than one room with your sleeping place hid behind a curtain, but if not make the best arrangement possible of this. If you can do so, it will not be amiss to arrange everything to your taste and necessities in the beginning.

To plan and describe and ideal office that would be satisfactory to every one or meet the demands of all, is not contemplated, but the accompanying sketch is a combination of two different offices, and has many desirable features for an office in the country or small town.

The general office should be roomy and well lighted, if possible 16 feet square or its equivalent. If it is contemplated that the library should be arranged for elsewhere, this may be some smaller. It should have windows on two sides of the room, while an open fire place is the more cheerful, and probably healthier; for utility and economy the heating will be by stoves, unless it is convenient to use steam heat or other process, as in large public buildings.

A private room, separate and apart from the main office for a consultation room is desirable, if not esential. This needs to be large enough for an examination table, one or two chairs instrument cabinet, and a small set of shelves for holding a few medicines that are usually called for in treating chronic patients at your office. If desired, this can be used also as an operating room, and is especially necessary in gynecological cases are cared for at the office.

Both male and female patients should be examined in private. You can do justice to neither yourself and your patient otherwise. In the case of female patients it is advisable and generally much better to have either a friend of hers or your assitant present in making uterine examinations, or extended ones in which it is required to remove or loosen any part of the wearing apparel. For these reasons a private room it needed, as it is not desirable to use the general office for this purpose.

Two other rooms are convenient to have though they can be dispensed with. If much office practice is attempted, and your office hours are in any way crowded, a waiting room will be a convenience to both you and your patients. The fourth room will be a necesity only if you dispense your own rdugs.

This question will be discussed more fully in a future paper. It is possible to use the general office for a waiting room and dispense the drugs from the consultation room.

The furniture of your office should be substantial first of all. It should be built of good material, strong and durable, and as it will be subjected to rather rough usage, it should not be easily scarred. The amount of it will be a question for each individual to decide. A good desk with a number of pigeon holes is the most important. This because you should begin in the first days

of your practice to make notes, save clippings, and systematize your business generally; an easy chair of some description for use while reading; one or two rockers for your lady patients, and a lounge. The bookcase ought to be the most conspicuous piece of furniture you have, and a good reading table is a convenience. If able to do so, supply yourself at once with a revolving book stand for your books of reference; a wash stand with basin, pitcher, slop jar, towels and toilet articles should be concealed behind a screen in one corner, or if a drug room is used, can be placed in it. A few pictures preferably relating to the profession in some way, and a piece or two of statuary add much to the general effect. An office sign—nate and attractive, without gaudiness—should be placed upon the outside of the office. This should be your name followed by the letters M. D. The office hours, in smaller letters, under this, is permissible. Anything else is in bad taste, except where a specialty if followed—refeerence can be made to it. The sign can be penciled upon a window pane, if one is convenient to the street. It should not be placed upon the curtains or shades, as it smacks too much of commercialism.

Editorial Comment.

(*The American Medical Association.*)

The Atlantic City meeting of the American Medical Association, the fifty-fifth in its history, was the largest in point of numbers ever convened, and was in many respects the most profitable. The registered number in attendance was 2,890. The entertainment was ample and the committee of arrangements had made suitable provision for the general and section meetings.

A new departure at this meeting was symposia on different subjects, three of which on different evenings were held. The first was regarding institutions doing research work for the science of medicine, in which Drs. Billings, of New York, Holt, Billings, of Chicago, Ernst, and Stengil participated; the second was a symposium on government services—touching the relations of the medical offices of the government to the general profession; and the third was the departments of scientific research of the government. These symposia were well received and will probably be a feature at future meetings.

Dr. Jno. H. Musser, the president, delivered his address on the evening of June the 7th in the Presbyterian Church. He prophesies success of the affairs of the association under the new constitution, and spoke highly of the labors of the House of Delegates. The larger part of the address is devoted to medical education, touching upon the present system of education as advocated and pursued by the medical teachers of the day. He asks if this is best for the student. The average medical student is not well grounded in literary education, many are unfitted by mental and physical defects, and quotes President Herrying as saying that "the reasoning of the mathematics—and mathematics is only reasoning—tends to promote *clearness* and *accuracy* in *perception, inevitableness in influence*, a sense of logical *orderliness.*" These are all essential to diagnosis in any department of life. The student should not be permitted to enter upon the study of medicine until properly prepared for its prosecution, and even if found deficient after commencing it, he should be dissuaded from continuing. The proper facilities for correct teaching are not available, as there are not enough hos-

pital advantages given or to be obtained. Fewer students, better prepared, more thoroughly qualified is advocated.

Eight thousand dollars were subscribed to the memorial fund of the late Major Walter Reed, surgeon in the U. S. Army.

The House of Delegates passed resolutions relative to the time of holding meetings of the different State Medical Associations. It is recommended that the various State Associations hold their meetings in the fall of the year, commencing in September in the most northern sections of the country and ending up in December in the southern section. This is to be suggested to the State societies for action before the next meeting of the National Association.

An effort was made in the House of Delegates to have branch associations formed of the various State contiguous to each other and a special committee after considering the advisability of such organization, recommended them. The South Atlantic branch under this recommendation would include Pennsylvania, Maryland, Delaware, District Columbia, Virginia, North Carolina and South Carolina. The presidents of the various State Associations to be vice-presidents of the branch organizations, and the presidents of these larger bodies to become vice-presidents of the National Association.

The membership of the association now numbers 44,362, of which North Carolina furnishes 800 and South Carolina 207.

The Association medal valued at $100 has not been awarded for several years at least, because no essay worthy of it has been presented, and the committee on the Prize Essay recommended that it be withdrawn, which recommendation was adopted. In this connection it is well to say the Senn medal is continued.

The special committee appointed on incorporating the Association reported in favor of a National incorporation by an act of Congress, and the House of Delegates instructed it use efforts towards securing this during the next session of Congress.

The papers read before the general meetings and so far published are of a very high order, and show a progressive spirit in the profession.

The Rush monument was unveiled in Washington on June 11th in the presence of the President and his cabinet, various other officials and the Association.

Everybody's Magazine claims that it declines to carry any patent medicine or fraudulent advertisement, but Dr. Todd, of Minneapolis, found several, whereupon some interesting correspondence occurred. The Magazine backed down from its first proposition, but claimed that it should be supported because other magazines carried $1,000 to $5,000 that it would not touch, nal to steal $5,000 than $..6..6..6 whereupon Dr. Todd asks if it is less criminal to steal $5,000 than $1,000. And the patent medicine man still thrives upon the credulity of the public.

An exchange says Vienna has opened a restaurant modeled on the successful ones in Germany, which are exclusively devoted to the task of supplying food to sick persons. They are semi-charitable undertakings, and the physicians are finding them a great aid in the treatment of patients in poor or moderate circumstances. The meals are delivered at the homes, kept warm in thermophore dishes.

Selections From Our Exchanges.

Typhoid fever Transmitted by Milk.—An investigation made under the auspices of the Philadelphia Bureau of Health has shown that of seventy-eight cases of typhoid fever in one ward, forty-one occurred among persons who obtained their milk from a single dealer in whose family there were cases of the same disease. Other cases occurred in the customers of another milkman, in whose family also there had been typhoid fever. In both instances the sale of milk was stopped, and a process of general cleaning and disinfection instituted. Other hygieic deficiencies were found, but it was definitely shown that here was no relation whatever between the disease and the filtered water.—*Med. Record.*

Hektoen, Ludvig: Typhoid Fever and Scarlet Fever, with Special Reference to the Diagnostic Value of Blood Cultures—(*Med. News,* September 26, 1903, p. 580).—Attention is called first, to the possibility of mistaking typhoid fever for scarlet fever on account of early rash and angina, as well as the co-existence of the two diseases; and second to the value of bacteriological examination of the blood in determining in such cases the existence of typhoid fever.

Schottmuler has shown that at the height of the attack in typhoid and paratyphoid fever the bacilli occur so constantly and in such numbers as to be readily demonstrable by cultural methods, several inocculations of 1 cc. of blood being made into many times that quantity of medium. The occurrence of typhoid and scarlatina has been emphasized by Curschmann, and Hektoen reports a case in which the two diseases developed at about the same time. The onset, rash, tongue and desquamation were distinctive of scarlet fever; the demonstration of typhoid bacilli and the specific agglutinins in the blood, as well as the subsepuent course of the disease, confirmed the diagnosis of typhoid fever.

The writer cites two other cases in which there was an initial rash resembling, scaralatina, but in which there was no desquamation; in both cases pure growths of typhoid bacilli were obtained from blood cultures. The diagnosis of scarlatina had been made in both instances.

On account of the presence of the tyhoid bacilli in the blood in the early stages of this disease, proper cultural methods make an early diagnosis possible ni such cases.

A Seventeen-Year Sleep—(Herbst, E. *Berliner klinische Wochenschrift,* No. 5, 5. 126, Feb. 1, 1904).—Gesine Meyer, 44 years of age, has slept for seventeen years. In the six years preceding the sleep she was well, but before passing into this sleep complained of a severe headache. Prior to the prolonged sleep she would feel drowsy, and would occasionally sleep for a whole day or a half-ady. In January, 1886, the sleep became permanent. During this long period she took nourishment and fluids. When she was fed she would be raised to a sitting posture, and could only take liquids or solids that had been reduced to small particles. When thirsty she would smack her lips and become restless; this would continue until the fluid was given. During the sleep she frequently suffered from colds, and once had influenza, during which illness she could not take food, and once she vomited. When the bowels moved she would groan, in this way attracting attention,

so that on the whole she was not difficult to care for. The eyes were always closed, and motion was not impaired; she would turn from side to side, move the legs and arms, presenting the usual appearance of one in normal sleeep.

The termination of this long sleep was sudden. One day she called her sister and said she had only slept one night. Was surprised that her brother did not wear his uniform, he having been a soldier at the time her sleep began. She said her head was clear, which led the family to believe that the sleep would not recur. She remembered everything that had occurred up to the time of falling asleep seventeen years before. During the sleep she gained in weight. To the question if she dreamed during her long sleep, she answered "No." Speaking was at first difficult as was walking.—*Medicine.*

The Treatment of Typhoid Fever.—In the treatment of typhoide fever, in which every general practitioner is interested, there is always something to be learned either by suggestions of new methods or by corroborations of old and generally accepted lines of procedure. From such points of view the subject is never an old one and its discussion is always fraught with practical benefits to patient and physician.

In an exhaustive symposium on enteric or typhoid fever in the January issue of the London *Practitioner* appear three chapters on the topic in question: One by Sir John W. Moore, M. D., physician to the Meath Hospital and County Dublin Infirmary, one by Dr. Herebrt P. Hawkins, Physician to St. Thomas Hospital, and one by Dr. Thomas McCrae, Associate on Medicine in the Johns Hopkins Hospital. These gentlemen, although following parallel lines, present respectively the British and American methods of dealing with the disease. As might be expected, there is a marked unanimity of opinion regarding fundamental principles upon which the theapeutics of the malady should be based. This fact is comforting at the start, as much confusion as to general indications is thus avoided, giving corresponding force and directness to the conclusions arrived at.

When we admit that the foundation of all rational treatment of typhoid fever rests upon the fact that the pyrexia itself is not the main object for attack, but is, so to speak, a beneficial reaction against the fever poison, we can better understand the inutility of mere antipyretics to fulfil their supposed indications. We by the latter means reverse conditions by trying to screw down the safety valve rather than give it proper vent for the force behind.

There being no typhoid serum to counteract purely toxic effects, reliance must be placed on mitigating the latter with the least possible danger of interfering with the conservative metabolic processes. Hence cold bathing is considered the most safe and certain means of controlling or reducing the high bodily temperature. Under certain circumstances, however, Sir John W. Moore admits that the ordinary coal-tar products so commonly used may be of incidental benefit when administered in small or moderate doses to meet special and minor indications. Thus "they assuage the toæmic rheumatoid pains of the disease and so allay cerebral excitement and invite sleep, . . . but pushed so as to reduce temperature, they imperil life." Dr. Hawkin is substantially of the same view. "There may be cases and conditions in which an occasional dose of quinine, phenacetin, antipyrin, or

salicylate of soda may be used. But the attempt to control pyrexia throughout a long illness has nothing to recommend it. Such a method is usually inefficient, and if it is to have a substantial effect, it must be carried out on a scale that is not free from danger.' Hence he agrees that to the proper end "there is nothing like cold water." The reason for the latter condition is based on conditions that obtain in high fever: "The continuance of a body temperature averaging a 103 degrees F. for three, four, or more weeks is a definite tendency to death which can be greatly diminished. It is probable that much of the injurious effect, especially on nerve tissue and cardiac muscle, which was formerly regarded as due to pyrexia alone, should more correctly be ascribed to toxæmia. But we may safely believe that with a lower average daily temperature the greater will be the conservation of the tissue resistance to bacterial life and activity."

In the Johns Hopkins Hospital antipyretic drugs as such are never used. According to Dr. McCrae, "hydrotherapy enters into practically every method of treatment of typhoid." As to drugs, "Many of the patients get no medicine at all. None of the so-called intestinal antiseptics are given. If the heart becomes rapid, the pulse weak, and the first sound indefinite, strychnine is given in doses of 1-60 to 1-20 grain every four hours with excellent results. This usually is not given continuously for more than twenty-four hours. For the severe headache, small doses of bromide and codeia or of opium are sometimes given."

The routine administration of alcohol is objected to. The rate and strength of the pulse are the only guides for its use. Thus at the height of disease, when the heart is clearly failing and the nervous disturbances are profound, from three to ten ounces of whiskey or brandy may be given. It is specially indicated in old persons from the first.

The various forms of water treatment are thus advocated in their order of importance:

(1) Immersion in cold baths (75 degrees to 50 degrees F.).

(2) Tepid sponging.

(3) The wet pack (60 degrees F.).

McCrae, with Brand advocates tubbing from the beginning as a standard treatment, giving as his reason that it lessons the likelihood of severe manifestations late in the attack. This, however, must be admitted as a negative proof of its value, as it is difficult to be sure of what may not happen. As the nervous symptoms are to a great extent an index of the degree of toxæmia, and as these phenomena become less pronounced with the bath system he quite logically concludes that tubbing increases the elimination of toxins. Thus the main objects of the baths is not reduce temperature *per se*, as during the height of the attack they have no appreciable effect in such a direction. The immediate effects are on the circulatory and respiratory systems. The pulse becomes reduced and firmer, the breathing is stimulated, congestion dissipated, and existing bronchitis benefitted. By its tonic effect on the skin there is less liability to bed sores. The main purpose is, after all, the reduction of mortality, from five to seven patients being saved in every hundred suffering from pure toxæmia.

At the Johns Hopkins patients are tubbed every three hours when temperature is 102.5 degrees F. and over. This temperature, it must be confessed, would not be considered as sufficiently high by the ordinary practitioner to warrant such seemingly radical treat-

ment, but in keeping with the indications of tubbing as previously given, the course is consistent enough. The first tub is usually given at 85 degrees F. and the succeeding ones 5 degrees lower until the most suitable point is reached. The time occupied for each bath is usually from ten to fifteen minutes. Should the patient be delirious, the first bath can be given at 70 degres. During immersion the surface of the body is rubbed constantly. Shivering is a common but insignificant sign. Patients are removed immediately from the tub if there be great distress, unusual cyanosis, vomiting, hemorrhage, abdominal pain, or symptoms of collapse.

As to the general objections against immersion, Dr. McCrae urges that they are due to faulty methods; that every one superinteding a clinic should experience an immersion himself—an excellent general principle that would eliminate any unnecessary harshness and ill-consideration in any other method of treating disease.

It is generally agreed that typhoid fever patients should be sparsely fed. The condition of the gastro-intestinal mucosa gives ample reason for this. Milk is the article preferred. Albumen water can be used as an alternative, also buttermilk, boiled milk, koumys, or whey. As a rule an adult should take four ounces of milk every four hours. Ice cream may be taken at any time.

Beef tea, peptonoids, and similar preparations are never given in Johns Hopkins, but if a change of diet is required it is usually accomplished by cutting off the milk and giving only whey and albumen.

The value of simple diet is abundantproved in the absence of gastro-intestinal disturbances. The argument against too much meddling with constipation has a like basis. "If possible leave the bowels alone." "We prefer a state of constipation, which is the rule in a majority of our patients. If necessary, the bowels are moved every second day by an enema, preceded sometimes by a large injection of oil. No purgative is given by mouth during the attack." On the other hand, if diarrhœa appears it is merely a signal for the reduction of the diet. If not, bismuth or opium may be indicated. For tympanites, turpentine externally or internally is recommended.

"With the question of food," says Dr. McCrae, "goes an equally important one, viz., the amount of water." Certainly too much emphasis cannot be laid on this essential requirement. To the old-fashioned practitioner who believed water to absolutely harmful in fevers this sounds like the rankest heresy; but too much stress cannot be laid upon the need of a newer doctrine.

We cannot give a better practical turn to the general thereapeutics of typhoid fever, or in fact any other form of fever, than to quote in full what Dr. McCrae says on this subject:

"The need of giving to patients large amounts of water is too often forgotten. Constant emphasis is laid on this, and a minimum of three litres of fluid (two and one-half quarts) *per diem* is the rule in this clinic. The endeavor is always made to give larger amounts. Many patients take six or seven litres a day (five to six quarts). The delirious patients are pressed to take it every hour at least. Those who are rational have a supply constantly at the bedside which they are encouraged to drink in addition to the regular feedings. To make sure that a typhoid fever patient is getting enough water requires constant effort on the part of

the physician and nurse. The amount of urine passed is a very valuable guide. We consider that too much importance cannot be given to this. Probably typhoid fever patients suffer more from lack of water than from any other thing. 'More water' might well be the motto inscribed in all our typhoid fever wards. Do not let us forget that our patients will do perfectly well on water alone for some days."—*Medical Record.*

Treatment of Typhoid Fever.—Butler contributes to *Medical News* his opinions in regard to this always interesting theme. For the cold mitten rub there is required the rather rough bath mitten, a bath thermometer, a vessel holding a gallon of water, reduced to a prescribed temperature by ice, a rubber sheet, a blanket, a linen or Turkish sheet, and a couple of towels. The rubber sheet, covered by the blanket, is placed under the patient, the body clothing removed and the sheet placed over him. The face, head and neck are wet with cold water, or, in women, a wet napkin is placed over the face. The front of the thorax is then uncovered, and the nurse, dipping her mittened hand into the water, rubs the surface vigorously until it is well reddened, frequently redipping the mitten in the water. When a good reaction of the skin is secured, the thorax is quickly rubbed dry with a towel. The remainder of the body is similarly treated, in order, right arm, left arm, anterior aspect of the legs; then, the patient having been turned upon his face, the back, and posterior aspect of the legs. The mitten rub may be repeated at intervals of three to six hours when the fever reaches or exceeds 102.5 degrees F.

For the first rub the temperature of the water may be 85 degrees F., for the second 80 degrees F., for the third 75 degrees F. Usually 65 degrees F. is the lowest temperature required, but the water may be reduced to 45 degrees or 50 dgrees F. if greater stimulation is necessary. The cold mitten rub has given tonic effects quite as good as those of the cold tub, with a very desirable minimum of disturbance of the patient. It has a very different action from ordinary sponging, in which the surface of the body is merely moistened with cold water, applied by a soft cloth, without friction.

Towel Bath of Baruch.—For the employment of the towel bath, the bed is prepared as for the mitten rub. Required are two linen towels, a large cup, a sponge, basin of water at 85 degrees F. and another at 70 degrees F. The patient is turned upon his abdomen; a towel having been dipped in the 85 F. water, this is, without wringing, laid smoothly over the entire back, gluteal regions and thighs, using both towels if one is not large enough. With the cup, the water at 70 degrees F. is poured over a part of the back, e. g., the upper left, and this part rubbed vigorously with the flat hand until the surface is felt to be warm, and another cup of water poured on followed by more rubbing. This may be repeated three times unless the part does not become warm. The remaining parts of the back and thighs are gone over in a similar manner and carefully dried. The patient is then turned on his back and the procedure repeated over the anterior portion of the body and thighs. From time to time, as required, the water which has flowed upon the blanket is sopped up and removed with the sponge. According to indications, the towel water may be reduced to 60 degrees F. and the cup

water to 50 degrees F.

The Ice Rub.—The ice rub is distinctly more vigorous in its action, and like the cold tub requires discrimination in using. The bed having been prepared with the rubber sheet and blanket, the patient may either be wrapped in a sheet dipped in 85 degrees F. water, or the wet towels may be used as in the towel rub. But instead of pouring water on, a part of the surface is rubbed with a flat, flat smooth piece of ice, held in a wash cloth, followed by friction with the flat hand until it warms up. This is to be repeated until the part remains cool. The whole body is successively gone over in this manner, and carefully dried.

The first method, the cold mitten, will suffice for nearly all cases. If a more refrigerant and stimulating procedure seems necessary, the towel bath may be used, and finally, if required, the ice rub. The nurse should promptly stop the giving of any one of these hydriatic measures if the patient's teeth begin to chatter.. Complaints of simple chilliness may be disregarded.

Medicinal Treatment.—It is probable that most cases of typhoid fever are over-medicated. It is simply appalling at times, even in hospital service, to see the list of remedies grow in bulk, by almost imperceptible additions at each visit of the physician, and it may require considerable self-control not to yield to the natural impulse which urges one to relieve or to meet every indication, whether important or not, which may arise. This piling up of remedies is extremely apt to disorder the stomach and to cause certain incidental untoward and undesirable by-effects. Many cases of typhoid fever do best with little or no medication, but at the same time we should have no sympathy with therapeutic nihilism, and in the face of gradual cardiac failure, pneumonic complications, intestinal hemorrhage, or similar serious developments, no one need hesitate to employ heroic medication if it seems necessary. There is neither reason nor humanity in allowing a case to progress steadily toward a lethal ending without employing medicaments which have proved indutiably life-saving in many instances.

There are but two points in medical treatment of which the author speaks —intestinal antisepsis and the checking of intestinal hemorrhage. Few well informed men now expect to accomplish anything in aborting typhoid fever by destroying the bacillus in the intestines. The proved absence of the germs in the blood and internal organs forbids any such anticipations. Nevertheless, clinical experience satisfies us that the ordinary putrefactive and fermentative changes which take place in the intestinal tube can be favorably modified by antiseptics, and that in consequence excessive tympanites, always an event to be deplored and dreaded, is of much less common occurrence when suitable remedies are systematically employed. Among eligible intestinal antiseptics are salol, guaiacol carbonate, creosote carbonate, zinc or sodium sulphocarbonate, bismuth and turpentine. These may be given in moderate doses at intervals of four to six hours. An initial dose of calomel is desirable, and during the course of the disease, especially when constipation exists, and the stools are fetid, small doses of calomel, one-fifth to three-fifths grain, with one-tenth to three-tenths grain of ipecac and a little sodium bicarbonate, have often proved of good service in lowering temperature and relieving general and gastro-intestinal discomfort. As a rule daily enemata are sufficient.

For the medical treatment of intestinal hemorrhage three remedies have proved to be of much value. The first two, which act by increasing the coagulability of the blood, are calcium chloride and gelatin; the third, an arterial constrictor, is the powered suprarenal or its active principal, adrenalin. A pint or more of a 10 per cent. solution of gelatin may be given in the 24 hours; 20 to 30 grains of calcium chloride every two to four hours; and five or more grains of the desiccated suprarenal every four hours, up to half a drachm in 24 hours. The results have been sufficiently encouraging in personal cases to make the administration of these remedies a routine measure, in preference to the opium, ergot and lead of former treatment. The use of moderate doses of opium or its alkaloids is always advisable in order to quiet the restlessness and excitement usually attending internal hemorrhage, and to sustain and regulate the action of the heart.—*Gaillard Med. Jour.*

Some Considerations of the New York City Milk Supply.—Dr. William Hallock Park, Assistant Derector of the Research Laboratory of the Department of Health, said that as time went on and population increased in New York City, we had greater difficulty in gaining definite knowledge as to where our food was coming from. He demonstrated by means of charts the milk supply coming from Pennsylvania, Massachusetts, Connecticut, and New York, all the milk being brought by railroads; in other words, the milk supply of New York city came from territory 300 miles across and 300 miles up and down, *i.e.*, 90,000 square miles of territory. He said the question naturally arose as to what New York was doing toward looking for purity of food. Outside of New York city there was not much to be done, because it was outside the jurisdiction of the local Board of Health; it was hardly possible, with the limited amount of money at hand, to inspect 90,000 square miles of territory. But, when they received word of bad conditions an inspector was sent, and samples of milk obtained, examined, and if found to be bad an endeavor would be made to correct it. Nothing further than that could be done unless more money was furnished the department. In some cases the farmers were instructed to do certain things, and often readily complied. In the city no trouble was experienced in handling these milk conditions. The milk was inspected as it came in on the railroads, samples taken and tested. During the summer months both bacteriological and chemical examinations were made frequently.

Three years ago he made an interesting personal observation. A sample of milk sent to the laboratory showed 5,000,000 bacteria to the cm., and he took a trip to see where this milk came from. He found that the wagons carryin the milk were brought to the cars at 3 o'clock p. m., and placed in them. The cars were left until 5 o'clock, when they brought to New York, without ice.

He said he had had another interesting experience within the last two or three months showing how we were in danger of infection. In December last he as called to investigate an epidemic of what was supposed to be scarlet fever about thirty miles from New York, up the Hudson River. The milk from a very good farm had been inadequate to supply the demand, so this farmer had obtained milk from an adjoining farm. In this cow stable there was not even a window, and within

it was found a septic cow, from which milk was taken only three days after calving; this milk was found to be filled with streptococci and infected thirty school boys who partook of it, giving rise to what was supposed to be a scarlet fever epidemic.

With regard to the Milk Commission, he said this was started because of the inadequate amount of money allowed to carry on the work in this vast territory properly. It would require many inspectors to cover the ground and get better farms, clean cows, better water supplies, etc. This Milk Commission would have to continue to exist and come between the farmers and the consumers until more money was available. The city gave the laboratories to this commission for its work, the railroads gave passes to the inspectors, and every facility was to be had for carrying on this work at present.

With regard to certified milk and inspected milk, he said the people cared more for the certified milk probably because they would not take the trouble to ask for the inspected milk. He asked that the members of the society should endeavor to increase the demands not only for the certified milk, but also for the inspected milk, which cost either 8 or 8½ cents a quart.—*Med. Record.*

Some Points on the Prognosis of Typhoid Fever.—R. E. Sedgwick concludes his paper as follows: The younger the patient, the more favorable, as mild cases are commonest in the young, while fatal complications are apt to occur in the old. If the onset of the disease be gradual, it is likely to prove a mild case but if the onset be sudden, then a severe case must be looked for. If the case be occurring in an outbreak of typhoid fever, then the general character of the outbreak may be of value in prognosis, the age and constitution of the patient being taken into account. The amount of pyrexia *per se* is not to be regarded as unfavorable in a patient of strong bodily health. The pulse rate is a good indication of the severity of the attack. Sudden changes in its rate are important guides to the onset of complications. Constipation is a favorable symptom contrasted with diarrhœa, which is unfavorable. Meteorism is an unfavorable symptom, because it favors perforation. Where perforation occurs, operative measures hold out the best chance. The dryness of the tongue is a valuable guide to prognosis. Hemorrhage occurs chiefly in serious cases. The earlier it occurs in the disease, the more serious it is. Early nervous symptoms must be regarded seriously, for they are an indication either of the severity of the attack or the lack of resistance in the patient. Most of the complications tend to recovery, serious complications being perforation, peritonitis and pneumonia. When perforation occurs, laparatomy is the only treatment. Hospital-treated patients have a better chance of recovery than home-treated patients.—*The Birmingham Medical Review.*

The Value of a Fecal Fistula in the Treatment of Typhoid Perforation.—Willam Bartlett says that we are accustomed to think of typhoid perforation as something uncommon and far away, and it is more than gratifying to know how the results attained are gradually improved, and how the most skeptical have been gradually won over to an appreciation of the value of prompt surgical intervention in these cases. The writer gives a number of interesting statistics. Until 1903 it had

been the universal practice to close the perforation carefully by sutures, and large statistics have shown that one-fourth to one-fifth of the patients had been saved in this manner. Then it occurred to Escher that the matter of closing the perforation might have something to do with the mortality. He found by searching the literature that one-half of the cases in which the opening had not been found, and so was not closed, had recovered, after the abdomen had been drained and a fecal fistula allowed to form. To test the truth of this deduction, he treated four cases by simply bringing the affected loop of the intestine up to the parietes, leaving it open and allowing a fistula to form. Three of these cases recovered, a ratio of 75 per cent. which has hardly been equalled in all the history of the subject, no matter what the form of treatment. The fistula in Escher's cases all closed promptly, one spontaneously, and the other two after secondary suture of the abdominal wall. The explanation of his success is very simple. The operation can be performed very quickly, two stiches being all that are required. The bowel can rapidly empty itself. The closure of a large perforation is always atended by the danger of producing an impermeable constriction. The writer gives the history of a case of perforation which he treated in the manner just described. As to the time of operation, the writer would be inclined not to delay longer than is necessary to prepare the patient and the instruments. He believes in the use of a general anæthetic when a patient is in a fair general condition. He calls attention to the necessity for rapid operation. As to the site of the incision, he says that since we can find the lesion in the small intestine most easily by beginning at the ileocolic junction as a fixed point, he can grasp only the lateral incision as the proper routine method, unless there be distinct localized symptoms elsewhere.—*The Medical Fortnightly.*

Epidemiology of Paratyphoid Fever.—Fischer describes in a recent article an epidemic of paratyphoid fever which occurred in Kiel, affecting more than eighty persons, and which is especially interesting because of its probable origin. Withtout going into details, suffice it to say that on account of the distribution of the cases, it was relatively an easy matter to exclude water supply, milk supply and the character of the soil from having had any role in the spread of this epidemic. In one single house occurred nine cases (in practically all cases the diagnosis was established on the basis of the usualy typhoid symptoms of mild type—only one death—and by carefully controlled aggluination tests). In this house lived a butcher who had his shop in it, and these facts directed attention to the possibility that the meat might have played some role in the spread of the disease. Inquiry brought the information that with five exceptions the families in which paratyphoid occurred were customers of this butcher. The exceptional cases Fischer would explain as the result of contact infection. He also points out that in an ordinary butcher shop conditions exist that in every way favor the secondary contamination of healthy meat by meat from an infected animal or infected in other ways. In this way he believes that the Kiel epidemic receives an explanation, which in every harmonizes with all the facts in the case. Paratyphoid bacilli are more than usually resistant to heat. Thus heating for 30

m. to 60 degrees C. did not destroy all the bacilli isolated from the cases in this epidemic. Even 5 m. to 75 degrees C. did not destroy all the bacilli. This resistance would serve to explain how imperfectly cooked infected meat, especially sausage, may spread disease. While the evidence in Fischer's paper is not conclusive as to the nature of this epidemic, yet the facts brought forward are highly suggestive and instructive. It serves to focus attention on the butcher shop as a possible starting point of epidemics of typhoid-like diseases.—*Journal American Medical Association.*

Polyuria in Typhoid Fever—(*Medical Record*).—At the Association of American Physicians, Dr. Fussel and others read a clinical paper on this subjest: A man 40 years old, was admitted to the hospital on the eighth day of his fever, April 15. The temperature ran the ordinary course. On May 7 it became and remained normal until his discharge. He was an extremely nervous individual. April 23 he had a slight internal hemorrhage. When he entered the hospital he had been getting 5 grains a salol every three hours, which gave rise to the presence of salicylic acid in his urine. He was bathed, but not tubbed, and was given eleven baths. The first 24 hours after his admission he passed 1,200 c.c. of urine; the second, 1,500 c.c.; the third, 7,000 c.c.; the fourth, 7,200 c.c., and then it dropped to 3,500 c.c., where it remained for some time. The polyuria really was a complication of the disease, because it disturbed him so much. The skin was dry, and he was very restless. One year after this attack he was examined again, and the urine was found to be normal.

The Effect of Glycogen on Typhoid Cases—(By F. S. Mason, M. P. S., Great Britain—*The American Practitioner and News*). During the recent epidemic at Butler, Pa., ample opportunity was afforded to test the claims made for glycogen, advanced by Dr. Jacques de Nittis, of Paris, viz., that it stimulates an increase of young leucocytes, and thus by phagocytosis the patient in the struggle with the disease.

Claude Bernard was one of the first to investigate and show the important role of glycogen, which exists in the liver of animals and in some low forms of plant life—mushrooms, etc.

Many observers had already remarked that glycogen ceases to be secreted whenever the normal conditions are impaired, which is in some obscure way connected with diminished phagocytosis.

Some 500 glycogen injections were administered hypodermically, and thousands of capsules by the mouth, to typhoid patients at Butler, during January, 1904, and from the clinical evidence collected by Dr. A. W. Hitt, who was delegated to study the effects of glycogen on the course of typhoid, it is impossible to deny, even if difficult to explain, the very low mortality among the cases treated. Doses as low as one grain, two or three times per day, very materially influenced the heart's action by increasing its fullness and steadiness, and reduced the temperature gradually to the normal.

The hospital charts collected by Dr. Hitt show that with some of the Butler cases there was long continued persistence of subnormal temperature. When glycogen was administered these cases promptly rose to normal, while the high temperatures (104 to 105 degrees) were reduced. In the lattr cases the injections were found preferable to

the administration of glycogen by the mouth. The injections of glycogen are painless, and produce no sores or any untoward effects. All patients were benefited by the treatment, while the length of the convalescence was much shortened.

The Differential Diagnosis of Typhoid Fever in Its Earliest Stages.—W. C. Rucker (*American Journal of the Medical Sciences,* January, 1904) draws the following conclusions:

(1) There is no single symptom in which alone an early diagnosis of typhoid fever can be made. It is only by careful consideration of the symptom-complex that a clinical diagnosis can be arrived at.

(2) The most trustworthy, as well as the earliest, sign of typhoid fever is the presence in the circulating blood of the bacillus of Eberth.

(3) The demonstration of the bacillus of Eberth in the blood is not beyond any fairly well equipped laboratory.

(4) The bacillus of Eberth is found in the feces later than in the blood, but with comparative ease.

(5) The presence of the bacillus typhosus in the rose spots is a trustworthy sign, but has no advantage over the examination of the blood from other localities.

(6) The serum reaction of Widal is seldom demonstrable during the earliest stages of typhoid fever. It is of value only in the higher dilutions.—*Medical Age.*

Typhoid Fever (Post-Gradute).—Weber states that we have to distinguish:

(1) True typhoid fever produced by the Eberth bacillus.

(2) Paratyphoid, produced by the paratyphoid bacillus, belonging to the family of colon-bacilli, in which all of the usual symptoms of typhoid may be present, but in a mild form, and convalescence is the rule.

The so-called fourteen-day enteric fever may be caused by infection from either (1) or (2) variety of typhoid bacillus.

(3) The colon-typhoid, caused by a moderately virulent bacterium coli, the fever here is not high, of short duration, generally no diarrhœa, and the whole course is benign.

He recognizes the following varieties:

(1) The abortive typhoid. That this variety is by no means rare, and that those physicians who claim to have a method of aborting by a synopsis method of treatment have been misled in judging of the actual effect of the remedies applied.

(2) Typhoid with constipation instead or diarrhœa.

(3) The bilious form, characterized by the frequent vomiting of liquid containing bile, severe headache, fluctuating, not very high temperature, weak pulse. It is very dangerous and may end fatally in ten to 14 days.

(4) Typhoid with meningitis.

Typhoid fever must be differentiated from:

(1) Tubercular meningitis: Temperature is not usually so high as in typhoid, pulse at first not so frequent, more tense, headache and vomiting occur early, bowels are confined, abdomen retracted. Old tubercular forms may be found. Squint, inequality of pupils, optic neuritis would be unmistakable signs.

(2) Acute miliary pulmonary tuberculosis: More cough and soon abundant rales, impaired resonance and other signs of pulmonary infiltration; tem-

perature more sustained.

(3) Gastro-intestinal catarrh of children: It may be difficult at first to distinguish it from typhoid, but there will be intermissions soon of fever and changes of symptoms that are inconsistent with the diagnosis of typhoid.

New York City Water Supply, with Particular Reference to Possible Contamination with Typhoid Fever.—Mr. Harry E. Bramley, Chief Sanitary Inspector, Department of Health, read a paper on this subject. He said there were two chief water supplies for Greater New York from the surface and from the underground source. A consideration of the former source was unnecessary because it was presumably pure. After treating of the water supplies to New York City from the earliest history he next considered the measures which could be adopted at present to prevent pollution of the present water sources as follows: (1) By the acquisition of more lands to meet the needs of the situation, a difficult matter at present because of the difficulty in obtaining titles to the land; (2) to compel the tenants in the neighborhood of the water supplies to introduce proper systems for the disposal of their waste; (3) by combating the constantly recuring nuisances; (4) the instillation of filtration plants. He recommended that, at present, the instillation of properly equipped and efficiently controlled filtering plants would be the best means of preventing possible contamination of the water with typhoid fever germs.

Typhoid Bacteriuria.—Munch reviews a number of books on this subject, including several that have been published or summarized in *The Journal*, and insists on the prophylaxis. Besides disinfection of the urine as systematically as of the feces, he advises disinfection of bath tubs used by persons who have or have had typhoid recently. Micturition during the bath is of frequent occurrence in typhoid fever. In local treatment of the bacteriuria injections of potassium permanganati into the bladder have resulted in the immediate cure of typhoid bacteriuria in a number of cases on record. He emphasizes especially the normous number of bacteria liable to be found in the urine, and the fact that it does not leave noticeable stains. Urine is evacuated much more frequently and copiously than the bowel dejecta, and is much more intensely infectious and for a much longer period. Ignored contamination from typhoid urine explains many puzzling infections and the contamination of many water supplies. The bacteriuria does not appear to have any influence on the course of the typhoid fever in most cases, although instances have been published in which cystitis persisted after recovery; in Houston's case it developed after three years.—*Jour. A. M. A.*

Unusual Course and Sudden Death in Typhoid.—Curschmann describes a number of atypical cases of typhoid, among them that of a physician who had no temperature in the morning, but after the strain of his office hours had a chill and temperature, which he diagnosed malaria until a severe exacerbation with diarrhea, roseola and enlargement of spleen cleared up the diagnosis. In another case a woman had been ordered to go to a watering place on a diagnosis of severe chlorosis, but applied to him first and he discovered an ambulant typhoid, as also in another similar case diagnosed as cardial neurasthenia. He confirms the ex-

perience of others that serious complications are more liable in the ambulant cases, and the sudden deaths in the first two or three days of typhoid are usually in cases that have had a long previous ambulant, unrecognized course. Fatal hemorrhage and perforation may occur in the mild and very mild cases as well as in the more severe forms. In one case the perforation occurring in an unrecognized ambulant typhoid was diagnosed as volvulus, in another as arsenic poisoning. Suddenly developing peritonitis should always suggest the possibility of an unrecognized ambulent typhoid. The fatal lesions may be found in the appendix region. In one case, diagnosed as influenza, death occurred suddenly in suffocation and the necropsy disclosed typhoid lesions in the intestines and an embolus in the left pulmonary artery. In another case the necropsy revealed the lesions of a three to four weeks' ambulant typhoid associated with a three months' abortion, suppurating metrophlebitis and fulminating sepsis. He has witnessed an ambulant typhoid terminate in a fulminating exacebation, and has observed 6 cases of hemorrhagic typhoid, 3 of them in children, and the others in hard drinkers. In one typhoid commenced hyperpyretic and became hemorrhagic toward the end.—*Jour. A. M. A.*

Diarrhea of Typhoid Fever.—The following combination is recommended by the *Dublin Jour. of Med. Science* to check the diarrhea of typhoid fever:

℞ Bismuthi subcarb...gr. x		65 gm
Sodii bicarb gr. v		30 gm
Cretæ prep. arom....gr. xx	1	30 gm
Tinct. opii.....gtt. v		30 gm
Spts. chloroformi...gtt. x		65 gm
Sodii salicyclatis		
Pulv. tragacanthæ, aa gr. x		65 gm
Aquæ...q. s. ad ℥i	30	gm

—*Therapeutic Review.*

Treatment of Typhoid Fever with Castor Oil.—According to C. C. Bass, antiseptics in typhoid are too inert to be of any practical value. He believes in purgation. The diarrhœa of the disease is an effort on the part of nature to remove toxic products from the system. If cases are taken early enough before the diarrhœa sets in and the bowels are cleared often enough with castor oil, there will be no diarrhoea This clearing out removes toxic products and thus prevents absorption with its fever, etc. The oil is superior to salines which are absorbed into a system already overloaded with abnormal bodies, and by the elimination of the salines, additional work is already put on the skin, liver and kidneys. The author's experience is based on seventy-nine cases, all of which recovered. Relapses occurred in four. In the majority of instances no medicine whatever was given except the oil. Abundance of pure water was allowed. Fluid diet was persisted in. Hemorrhages occurred three times. Bass advises the use of pure oil every twelve hours, regardless of the stage of the disease. The dose should be so regulated as to cause one or two movements, and will vary from one to eight drachms, depending upon the patient, the stage of the disease, and the condition of the bowels. This should be continued through all stages of the disease.—*Med. Record.*

Diazoreaction.—Pelzl (*Ibid.*) narrates the results of over 500 examinations. He found the diazoreaction positive in many cases of typhoid fever between the first and third weeks; in case of measles before the eruption and during the beginning of the eruption; in cases of scarlet fever and diphtheria, in advanced tuberculosis of the lungs and of the serous membranes, and in

cases of septicemia. The author concludes that the diazoreaction is therefore to be found in cases in which streptococci are circulating in the blood and their overwhelming presence is indicated by septic fever. It may serve as an indicator when to use antistreptococcic antitoxins when these have reached a higher and more perfect state of development.— *St. Louis Courier Med.*

Typhoid Fever.—To be used as an intestinal antiseptic and to relieve tympanites:

℞ Naphthol.....gr. xl.
Salol.....ʒss
Pulveris aromatica.....gr. xv.
M. et fiat in charta No. XII. Sig —One powder every four hours.

The following is advised as a heart tonic:

℞ Caffeinæ citratis.....gr. viiss
Tincturæ strophanthi.....f ʒ j
Aquæ.....q. s. ad f ʒ ij
M. Sig.—Shake. One teaspoonful every four hours.—*Journal American Med. Asso.—Therap. Rev.*

Lryngeal Complications in Typhoid Fever; Report of Case; Tracheotomy; Recovery.—H. Dupuy gives a summary of the literature of this subject and narrates his own case, that of a women of twenty years. At about the end of the fourth week, signs of laryngeal stenosis appeared. Laryngoscopical examination showed the cords fixed in the median line with only the slightest separation along their posterior borders during inspiration. This was referred to ankylosis of the cricoarytenoid articulations. A high tracheotomy was done and relief ensued. Four hours later the trachea filled with blood-clots from a source that could not be determined. A later attack of heart failure was also controlled and the patient recovered. Ten days after operation the cords began to move, and three days later the larynx was able to carry on both its respiratory and phonatory functions. The author's general conclusions are as follows: Twenty-five cases collected from a period of fifty-eight years give evidence, bacteriological and clinical, strongly supporting the view adopted by the majority of observers, that the laryngeal involvement in most instances is a direct typhoid infection. A high death rate, as shown by statistics, when this complication exists, teaches the salutary lesson of always examining the larynx when the danger signals of hoarseness, dyspœe, or dysphagia set in. The favorable results which follow operative intervention offers such a contrast to the high mortality without operation that there can be but unanimity of opinion as to its propriety. Tracheotomy is the most approved, because in most cases the only possible surgical procedure which can save life.—*N. Y. Med. Jour.—Med. Review.*

Typhoid in Cleveland.—The occurrence of typhoid in Cleveland during the last thirty years is briefly analyzed by Handerson. Accepting the idea that it is usually a waterborne disease, tis history would point to a water supply always more or less defective and subject to attack of acute and severe infection with typhoid poisoning. The moderately high average mortality from typhoid fever, interrupted by short epidemics of greater or less severity, are noted.

The Widal Reaction in Typhoid.—Ladd has studied the Widal reaction in the present epidemic in Cleveland in some 454 cases at the Lakeside Hospital. The figures show that the Widal reaction was distinctly delayed in its appearance during the past six months; that it was less positive than was the

case previously, and there were more anomalous cases than was formerly the rule.—*Cleveland Med. Jour.—Jour. A. M. A.*

The Disinfection of Excreta of Typhoid Fever Patients.—The Wilmington Water Department has issued the following suggestions for preventing the spread of enteric fever:

1. Keep on hand a five gallon jug or other suitable vessel filled with any one of the following solutions:

Solution No. 1.—Chloride of lime of the best quality, guaranteed to contain at least 25 per cent. of available chlorine and free from a strong odor on opening the box, six ounces to each gallon of water.

Solution No. 2.—Formalin (40 per cent.) five fluid ounces to each gallon or a little over one and a half pints to the five gallons of water.

Solution No. 3.—Carbolic acid four ounces to the gallon or one and a quarter pints to the five gallons of water.

The choice of any of these solutions should be determined by the ability to obtain the pure article. Whatever solution is used the vessel should be kept tightly corked.

2. Have the receptacles for the stools (bed-pan, night-chamber, etc.,) provided with closely fitting lid, or improvise a lid from several thickness of paper with some weight over it. It is better to have two receptacles of a kind so that a clean one may be always on hand for the patient's use.

3. When required for use, put one pint (two glassfuls) of the disinfectant into the vessel (or if the urinal is used, a quarter of a pint) so that the discharges may come in contact with the disinfectant on their very issue from the body. No harm is done if some of the disinfectant should happen to spill on the bed clothes.

4. Remove the vessel containing the discharges to some secluded place in the house, add enough of the disinfectant to completely cover the discharges, stir up the contents with a small stick, replace the lid and allow it to stand for at least two hours. Remember that the longer you permit the discharges to come in contact with the disinfectant the more harmless do they become and the less obnoxious to handle.

5. If there is no water closet in the house, the discharges, after the disinfection, should be buried in the soil at least 100 feet from any well or stream.

6. When your hands become soiled with the discharges, they should be washed, first in the disinfectant (neither of the disinfectants will injure the skin) and then with soap and water.

7. All articles of the patient's clothing which have become soiled, and all the sheets, towels, napkins, etc., used by the patient should be kept in Solution No. 2 or 3 (not in Solution No. 1) until they are washed.

8. Use the disinfectant freely on all occasions requiring cleansing of soiled surfaces, and remember that "an ounce of prevention is worth a pound of cure."—*American Medicine.—Therap. Rev.*

Typhoid Suppuration of Ovarian Cyst.—Zantschenko describes the removal of a suppurating ovarian cyst eight months after typhoid fever. The findings confirmed that it was a case of pure infection of the pre-existing cyst with typhoid bacilli. Suppuration has not hitherto been observed in a cyst of this kind, a pseudo-mucous ovarian cystoma.—*Jour. A. M. A.*

For the Diarrhea of Typhoid Fever.—Hare recommends:

℞ Acidi sulphurici aromati..... ʒj

Extracti hematoxyli fluidi....f℥ss
Spiritus chloroformi..... ...f℥ss
Syrupi zingiberis....q. s. ad f℥iij

M. Sig.—Two teaspoonful ever ytwo to four hours.—*Mississipi Med. Jour.*—*Therep. Rev.*

Typhoid Fever.

(*Maryland Med. Journal.*)

Fulton (*Journal of the American Medical Association*, January 9, 1904) discusses some unconsidered hindrances in the prophylaxis of typhoid fever. The first hindrance he considers is a mistake in diagnosing the disease—a mistake which was strikingly exemplified by the results in the Spanish-American war, where one-half of the cases were not correctly diagnosed by the regimental surgeon. As Fulton well says, "typhoid fever is taught too much, is studied far too little." The reason for the mistaken diagnosis in the majority of cases was that the disease, which was in reality typhoid, was considered to be malaria, and was treated accordingly. Fulton then furnishes a series of most interesting charts regarding the comparative mortality in the different sections of the country reported as due to typhoid and as due to malaria, and he believes that of all the mortality charged in the South to malaria, half, perhaps, is really due to typhoid fever. "To the large deficiency in the typhoid mortality which is fairly ascribable to the malaria delusion one must add a further correction for the mistaken diagnosis of typhoid to the extremes of life. With respect to children the conviction is gradually settling in the minds of pediatrists that typhoid is common in childhood. When to these sources of error in the diagnosis of typhoid the amulant and anomalus cases are added, the total default in diagnosis is seen to amount to at least 50 per cent. of the cases actually occurring."

The next point in which the medical profession is but half informed is as to the preferred habitat of typhoid fever, and, as Fulton shows by a large array of figures and charts, typhoid fever has at the present time and in this country a heavier incident in small communities and rural districts, and probably this has been the case for a long time. "When we consider the rank of typhoid fever among all the causes of death, we find that rural typhoid fever is credited with sixty-two in every 1,000 deaths, against thirty-eight per 1,000 for urban typhoid."

In conclusion, Fulton insists that the first step in the restriction of typhoid fever must fail for lack of diagnostic skill in the rank and file of the medical profession. The correction of this delinquency does not wait on improved methods of clinical or laboratory diagnosis, but on a general realization of the ubiquity and perennial activity of typhoid fever and on the lumbering advance of reform in medical education.

A subsidary conclusion from this part of the present study is that a very large majority of the deaths attributed to malaria are due to causes in which malaria does not even participate.

The second important conclusion drawn from a study of the distribution of typhoid mortality is that the infection is more heavily seeded in smaller communities, and that the propagation of the disease is in general from the country to the town rather than from the town to country. The explanation of this fact is probably found in the greater care given to the disposal of human excrement as communities grow more populous.

The prophylaxis of typhoid fever consists essentially in defense against excremental contamination, and precisely as the barriers are more or less

remote from the sources of infection is the defense less or more effective. In this view of the prevention of typhoid fever it must appear that, notwithstanding the very great value of the defense on which most rely, these defenses do not, and by their widest conceivable extension cannot, satisfy the requirements of a rational prophylaxis of typhoid fever. In town and country alike the appointed time and place against the spread of typhoid fever is whenever and wherever a case of typhoid fever is recognized. If there is one direction in which more than another the political influence of great cities should be exerted it is to bring the rural districts and small communities under legal obligation to render strict accounts of deaths and the causes of death, and to take and give good heed to the preventable diseases at the time and place of their occurrence.

This article of Fulton's is very suggestive and should be read by all physicians interested in the broader aspects of the typhoid problem.

THE DIFFERENTIAL DIAGNOSIS OF TYPHOID FEVER IN ITS EARLIEST STAGE.

Rucker (*American Journal of the Medical Science,* January, 1904) furnishes a well-written and carefully-prepared article on the early diagnosis of typhoid fever, in which the various mistakes in diagnosis are taken up one by one and carefully considered. The conclusions of this article, which is of especial value as regards the bacteriological study of typhoid fever and the differtiation of the typhoid bacillus from micro-organisms which closely resemble it, notably the paratyphoid bacillus, are as follows:

1. There is no single symptom on which alone an early diagnosis can be made. It is only by careful consideration of the symptom complex that a clinical diagnosis can be arrived at.

2. The most trustworthy as well as the earliest sign of typhoid fever is the presence of the circulating blood of the bacillus of Eberth.

3. The demonstration of the bacillus of Eberth in the blood is not beyond any fairly well-equipped laboratory.

4. The bacillus of Eberth is found in the feces later than in the blood, but with comparative ease. The presence of the bacillus typhosus in the feces is of great value as a corroborative sign.

5. The presence of the bacillus typhosus in the rose spots is a trustworthy sign, but has no advantages over the examination of the blood in other localities.

6. The serum reaction of Widal is seldom demonstrable during the earlier stages of typhoid fever. It is of value only in the higher dilutions.

Cases of Venous Thrombosis Occurring in the Course of Typhoid Fever.

(*Medical Record.*)

Thayer states that his observations were taken in Dr. Osler's wards at the John Hopkins' Hospital, and out of 1,462 cases of typhoid fever there were 39 instances of venous thrombosis, or 2.6 per cent. In 5 of these 39 cases a fatal result was recorded. The lower extremity was the seat of the thrombosis in all but a very few of the cases. In 21 instances the thrombosis was in the femoral vein, popliteal vein in 5, iliac vein in 5, in the calves of the leg 5, in the saphenus vein 3, etc. In 36 cases the development of the condition was associated with fever; in 3 there was none. In 26 cases the fever was intercurrent; in 13 the temperature was normal at the time the thrombosis was

first noticed. In 11 of the 39 cases the complication was associated with chill. The first distinct symptom was pain, and, in the instances of femoral thrombosis the pain was along the course of this vein. In 22 of the cases a leucocytic count was made, the highest recorded being 24,864; this was in a case of iliac vein thrombosis occurring during the third week of the disease. The lowest was 2,700, and this occurred on the day after the onset of the thrombosis. In all of the instances there was more or less prolonged disability. In 6 cases there was œdema lasting several weeks and longer; in 4 there was severe cramps in the legs; in 1 the patient complained of severe pain in the leg and thigh, especially after standing. The following brief conclusions were drawn: In 28.2 per cent. of the cases the venous thrombosis was associated with chills, and, in most of the cases, there was an increase in the leucocytic count, depending upon the extent of the lesion. In cases of sudden severe pain in the lower part of the abdomen and associated with leucocytosis the possibility of iliac thrombosis should be carefully considered. He emphasizes the fact that thrombosis of the veins of the lowed extremity was a very serious condition, and the after results should not be lost sight of. Marked varicosities may be present and lead to more or less permanent disability, as illustrated in a photograph he showed.

NEWER MATERIA MEDICA.

Good and Seasonable.—Where hysteria is the result of uterine troubles, aletris cordial Rio, combined with celerina, is an excellent remedy.

A word about some remedial preparations which the busy practitioner will find always useful, particularly at this season of the year, will no doubt be of interest. First, we will mention the old time-tried antikamnia and salol tablet, so useful during the hot weather, when even the "grown folks" load up their stomachs with the first offerings of the season. Hare says: "Salol renders the intestinal canal antiseptic and is the most valued drug in intestinal affections." The anodyne properties of antikamnia in connection with salol render this tablet very useful in dysentery, indigestion, cholera morbus,, diarrhœa, colic, and all conditions due to intestinal fermentation. Then the "triple alliance" remedy so well and favorably known by its self explanatory title, namely: "Laxative Antikamnia and Quinine Tablets." To reduce fever, quiet pain, and at the same time administer a gentle tonic-laxative, is to accomplish a great deal with a single tablet. Among the many diseases and affections which call for such a combination, we might mention coryza, coughs and summer colds, chills and fever, biliousness, dengue and malaria with their general discomfort and great debility.

We cannot overlook our old friend the antikamnia and codeine tablet. The efficacy of this tablet in neuroses of the larynx is well known, but do all of our doctor friends know that it is especially useful in dysmenorrhea, utero-ovarian pain and pain in general caused by suppressed or irregular menses? This tablet controls the pain of these disorders in the shortest time and by the most natural and economic method.

The synergetic action of these drugs is ideal, for not only are their sedative and analgesic properties unsurpassed, but they are followed by no unpleasant after-effects.

First Inception of Coca Wine.—Coincident with the earliest scientific presentation in Europe, about 1859, of the physiological properties of Coca by Dr. Mantegazza, and of the investigation of its chemical constituents by Professors Woehler and Niemann, and before the alkaloid cocaine had been described, Mr. Angelo Mariani, a pharmaceutical chemist, of Paris, France, prepared a wine from Coca leaves which represented their full restorative qualities as employed in the Andes. This tonic-wine has ever since borne his name, and is known throughout the world by the proprietary title Vin Mariani. During nearly half a century this preparation of Coca has been maintained of uniform excellence, with a distinctive quality that its numerous imitators have failed to approach. The reason for this must be obvious to the thoughtful. With the advance of improvements in various pharmaceutical processes, Mr. Mariani has adapted to his extensive manufacturing plant every means that might tend to keep the details of his product near to the high standard of his first ideal. This was the more earnestly desired because of the accumulated encourage ment of thousands of practitioners who have endorsed Vin Mariani as a tonic of sterling worth.—*The Coca Leaf*, November, 1902.

Indigestion and Malnutrition Ruin Health.—Resulting in all sorts of debility and all varieties of disequilibrium or sickness many of which may be well met by the following:

Antiscorbutic (granule) Calcidin, gr. 1-3; Phytolaccin, gr. -3; Stillingin, gr. -6; Arsenic iodide, gr. 1-67; Nuclein, gtt. 4.

This formula is one which will appeal to the doctor who has had to deal—and who has not?— with that class of cases which present a general morbid condition of the system. Some have sores, others eczema or other eruptions and others are merely generally out of sorts and fail to get well under any treatment. The children with bad breath, enlarged glands, decaying teeth, morbid appetites, etac., are puzzles even to the old practiciaus. They try iron, no result; they give purges, the child gets worse. To these exhibit this formula, one three times daily, and results will be surprising. In all scorbutic conditions in the beginning of tubercular cases and as a general alterative give this remedy and you will be well plaseed.

Digestive: Strychnine ars., gr. 1-134; Quassin, gr. 1-12; Papain, gr. 1-3. This granule can be combined with the foregoing with infinite advantage. There is not a case which calls for the first which will not be benefitted by the giving of the second. One to two before each meal will cause increase of appetite and assimilation and gradually but surely will correct the stomachic and intestinal disorders. As a general alterative tonic treatment the exhibition of these two formula—adding, perhaps, in some cases showing distinct symptoms of intestinal fermentation five grains of the Intestinal Antiseptic an hour after eating—will give positive and marked results.

Doctor, you should have plenty of these in your case:

Prices, see list.	100.	500.	1,000
Anticorbutic	$.38	1.53	$3.00
Digestive	.26	1.15	2.25

—The Abbott Alkaloidal Co., Ravenwood Station, Chicago; Branches: New York, San Francisco.

Urticaria on Arms and Chest.—The following treatment rarely fails to give relief:

Sponge the parts affected with a 2 per cent. solution of Hux-Sal (Antiseptic Salt) or apply as compresses to allay itching. Allow the body to dry and then apply with some friction.

R Mentholi ℥i
Spt. Vini Rect. ℥i.
Betul-ol (Oleo-Methyl-Salicy. Comp.)
℥iv
M. ft. applic.

(For external use only.)

An Antiseptic Vaginal Tampon.—In cases where inflammatory conditions call for the use of a medicated tampon, the following will be found most satisfactory and free from danger or objections:

R Pulv. Alum. 30 grams
Hux-Sal 2 grams
Glycerini 300 grams
Aquæ 200 grams

Misce.

Sig. Use to moisten vaginal tampons.

According to the latest edition (11th) of the Extra Pharmacopœa (Great Britain), page 26, Kugloids are capsules containing creosote and eucalyptol combined with benzoic acid and quinine glycerophosphate; they are recommended for influenza, pharyngitis and bronchitis.

Sanmetto in Genio- Urinary Diseases.—I have prescribed Sanmetto with much satisfaction in diseases of the genito-urinary organs—with marked effect in prostatic troubles of old men, and in different kinds of urethral inflammation, even in gonorrhœa. It is certainly an excellent vitalizing tonic to the reproductive system. I am using original packages, except very rarely in smaller quantity, and when I am absolutely sure that no substitution is practiced, as I see it with my own eyes, if necessary, that the genuine article is gotten by my patients. The subject of substitution, so largely practiced, is one of pre-eminent importance, and needs to be watched by all physicians with both eyes.—*Joseph W. Robb, M. D., Russell, Kansas.*

A case of Idiopathic Anemia—aReprinted from *St. Louis Medical Era, March,* 1904.—Idiopathic anemia presents some very difficult conditions to relieve. During May, 1903, Mr. B. H., aged 48 years, gave up his work as mail carrier on a R. F. D. route, and took to his house and shortly after to his bed. He received good medical treatment from several competent physicians, but steadily failed until he seemed almost bloodless. During the autumn he was taken to Clifton Springs Sanitarium, where a blood count showed 1,500,000 red corpuscles to a cubic c. mm. and he was sent home as a case not suited to treatment. Less than three weeks ago I first saw him. He was confined to his bed, dropsical, nearly bloodless, not greatly emaciated, hardly able to express an idea, brain being almost inactive. He had always chewed tobacco excessively; this I stopped abruptly and completely. I put him on pepto-mangan (Gude), in place of ———— which he was taking, and gave him 1-20 gr. of arenious acid in tablet form once daily.

For five days he lay partly comatose, then began to revive, and from that time on has improved very rapidly. The dropsy is all gone, and the mucous mebranes of lips and eyelids are red. He sits at the table and eats several

pounds of red meat daily, sleeps quietly, and his brain works easily and actively. I am not puffing any particular medicine; Indeed, I hardly know which to give the credit to—the pepto-mangan or the breaking of the tobacco habit. He has never asked for tobacco since he "came to." He seems so amazed to find himself improving that he is willing to give it up.—*Chas. L. Lang, M. D., Weedport, N. Y.*

On Noitol.—This may certify to a series of researches on the Physiological Action and Therapeutic Application of this preparation, and to the following deductions:

1. It cleanses the surface with which it is brought in contact.
2. It is antiseptic.
3. It is penetrating.
4. In the treatment of eczema it is applicable to (*a*) the secretory stage, (*b*) the serous stage.
5. It promotes healing.
6. It diminishes the calibre of the cutaneous vessels.
7. It is distinctly remedial when there is a neurotic condition of the skin, evidencing a selective action on the cutaneous nerves.
8. It abstracts water from the tissues.
9. It relaxes the tissues, and, therefore, because of removing pressure from the sensuory nerve filaments, is (*a*) a relief to the tension of the inflamed parts, and (*b*) exhaustive or irritability.—*W. H. Morse, M. D., F. S. S., Dermatological Chemist.*

Hay Fever.

For years the malady known as hay fever has been the theme of many an able discussion. Its etiology, pathology, prophylaxis and treatment often have been the subject of study and experiment by physicians, and also by intelligent laymen. The disease has been described as a catarrhal affection of the conjunctivæ and the mucous membrane of the respiratory tract, characterized by an annual recurrence at about the same date in a given case. Another veiw is that the disease is a neurosis, and that the local symptoms (rhinorrhœa, sensuory disturbances, etc.) are due to vasomotor paralysis.

The most conspicuous symptoms of hay fever are a burning and itching sensation in nasal region and between the eyes; violent paroxysms of sneezing; a copious discharge of serum and liquid mucous from the nasal passages; frontal headache; and in not a few cases, some asthma.

The diagnosis having been established, the supject of prevention and treatment is of the utmost importance. It would be utterly useless and wearisome to attempt to review the list of remedies and the methods of treatment that have been proposed for this disorder. The interests of physicians and patients will best be served by a recital of facts respecting the most successful mode of treatment known at this time.

A glance at the list of symptoms and a brief consideration of the pathology of hay fever lead to the immediate conclusion that the chief indications are to check the discharge, allay the irritation of the nasal mucosa and relieve the stenosis. The only single remedy that meets these indications is Adrenalin as represented in Solution Adrenalin Chloride and Adrenalin Inhalant. By stimulating the vasomotor supply it contracts the arterioles, and thus promptly and efficiently relieves all the annoying symptoms referrable to vasomotor paralysis. By its powerful astringent action upon the mucous membrane, which it blanches completely in a few moments,

it controls symptoms referable to a catarrhal in flammation of that structure. Indded, the results that have been accomplished with Adrenalin in this field alone are really remarkable and of the utmost importance. Parke, Davis & Co., who market Solution Adrenalin Chloride and Adrenalin Inhalant, have prepared a very complete treatise on the topic, which contains more information than is to be found in the average text-book. They will cheerfully mail a copy of the book to any physician applying for it.

Irregular Menstruation and Treatment.

(E. C. Wiley, M. D., Louisville, Ky.)

Practitioners or medicine are consulted by no class of patients who display greater solicitude than those who have ameorrhoea.

In the popular failure of menses to appear is supposed to be due either to pregnancy or tuberculosis, and either may cause a degree of anxiety that is truly intense.

The term amenorrhœa is used to mean the total absence of the menstual discharge, or a marked deficiency in the quantity of the flow. Amenorrhœa may be physiological or pathological. Dur-pregnancy the absence of the menstrual discharge is, of course physiological and demands no consideration in this article. When pathological, the causes of amenorrhœa may be said in general to be due to the following:

(1) Taking cold, at or near the menstrual epoch. (2) Severe mental perturbation, as fright, sorrow, or great elation of spirit. (3) It may be symptomatic in several affections, as tuberculosis, æmia, chlorosis, syphilis, typhoid fever, nephritis, pelvic peritonitis, and other morbid conditions. (4) Obesity. (5) Luxurious life, or over-taxing the nervous system. (6) Stenosis or artresia of the cervical canal, of imperfect development of the tubes, ovaries or uterus. (7) Vicarious menstruation may make the condition obscure, there being a discharge at the regular monthly periods from the nose, lungs, bladder, stomach, nipple, or other part.

The treatment of amenorrhœa must comprehend attention to general considerations, and special indications must be remembered in the various expressions of amenorrhœa.

The treatment must, in a word, comprehend remedies and measures which are indicated by the etiological factors present in every case which comes up for treatment. When the amenorrhœa is caused by having contracted cold, the patient should have a warm sitz bath, and hot applications should be applied to the abdomen and thighs. Often a hot vaginal injection will serve a most useful purpose, and a laxative, preferably a saline, will greatly aid in bringing on the flow.

In amenorrhœa, delayed menstuation and dysmenorrhœa, Egoapiol (Smith) has acted in my hands in a most satisfactory manner. In scanty menstuation, I found it particularly valuable, and I shall enter in detail about one of a series of cases of this character, later on in this article, where this agent brought on a full menstruation and the general health of the patient began to improve at once. When mental perturbation is a factor in these cases it is manifestly the duty of the physician to have the environments of the patient made as quiet as possible, and anti-spasmodic or nerve sedatives should be added to the treatment.

When amenorrhœa is associated with syphilis, the uric acid diathesis or morbid condition must receive correct treat-

ment. My experience with Ergoapiol (Smith) is such that I regard it as an indispensable remedy in all expressions of amenorrhœa along with the proper remedies for any diseased condition associated in the causation of the affection. Of course, those cases where the amenorrhœa is due to atresia of the cervical canal, and to any other condition which is remedial only by surgical means, drugs will prove of no avail. The same can be said of instances of the amenorrhœa due to a rudimentory state of the female organs of reproduction.

A lady sometime ago brought her daughter to my office for treatment of amenorrhœa. The girl was 18 years old and was visible anæmic. She had an indifferent appetite and was more or less dispirited. She had enough menstrual flow each month to stain the napkin, but this was all that could be said. I I had this patient to take Egoapiol Smith, one capsule after each meal, and on going to bed, regularly for a month. At the next menstrual period the discharge was without pain and free, and the quality and color was as natural as she had ever known her menstuation to be. She took Ergoapiol (Smith) another month and then ceased to have any further trouble. Her color is good and her appetite is likewise excellent; she is full of spirit, and, in a word, well.

A lady aged 33 had scanty menstuation which had covered the period of a year. At no time during the year had her menstrual period been longer than eighteen hours, but general twelve hours told the tale. Her menses were not only scanty, but the color of her menstual blood was pale, and this was attended with a disagreeable ordor. This woman had no associated disease that most searching examination could bring out. Still she had steadily increased in flesh for the last two years, and to this I attributed the amenorrhœa.

I had this patient to take systematic exercise and a dietary that was rational, and to take Ergoapiol (Smith) with regularity, a capsule four times a day. After two months this woman ceased to take the remedy, her menstuation having become normal.

A girl 20 years old was sent to me by the matron of a boarding school. She enjoyed good health prior to entering the school, but for the past three months she had not menstuated and was suffering constantly with vertigo and had attacks of hysteria. I attributed the amenorrhœa to change of conditions of life—that of an open life on a farm to that of a shut-in inactive life. Ergoapiol (Smith) was given after each meal for two weeks prior to the day of her usual menstuation. This brought her menses on fully. She has since had no further trouble in this way.

Mrs. A. P. L., aged 35. This lady suffered with frequent attacks of headache, had backache nearly all the time, and suffered greatly with vertigo. She was the mother of three children, the youngest being 6 years old. For four years past she had constantly had scanty menstuation and the blood was very pale. She rarely had the menstrual flow to continue longer than fifteen hours. I was satisfied that the vertigo and all her distress was due to insufficient menstrual flow, and I accordingly put her on Ergoapiol (Smith). She took it through the month, one capsule after each meal; but for a week before the expected period she took two capsules instead of one. She was greatly pleased this time to have a full and free menstruation. Acting on my advice, she took the capsules three times a day

for two months, and this acted in a happy manner, and she has now passed an entire year and has not failed to menstuate freely.

My diagnosis was fully confirmed by this woman's health being good in every way since the establishment of menses on a basis of health.

Enterocolitis and Cholerainfantum.

Cleanse the intestinal tract with calomel and a saline or with castor oil. Prescribe a suitable diet, easily digested and non-irritating. Irrigate the rectum and colon at suitable intervals with normal salt solution or some mild antiseptic, using for the purpose a soft rubber catheter or colon tube.

Instead of opiate which lock up the secretions and there favor auto-intoxication, relieve the muscular rigidity and the excruiating pain which is such a drain upon the vital forces by the use of antiphlogistine, as hot as can be borne to the entire abdominal walls and covered with absobent cotton and a compress. If the patient is not too far gone the effect will be astonishing. The little sufferer, who until now has been tossing in agony and restlessness, with drawn features, will in most cases quickly become quiet; the drawn look will leave the face and a restful slumber will often supervene and start him upon the road to recovery.

The explanation of this, in part, is not far to seek. The heat and moisture combined with Antiphlogistine's well known hygroscopic properties, directly soothe the inflamed parts, reflexly contracting the visceral blood vessels and relieving their engorgement. The tension of the muscular and nervous system is further relieved by the action of Antiphlogistine through the solar plexus thus adding to and emphasizing its local effects upon the inflamed intestines

How to Avoid Prescribing Opium and Morphine.

Dr. B. N. Shade, of Washington, D. C., in an article published in the *Medical Summary*, refers to many unfortunate effects of prescribing opium and morphine, intimating that the depressing after-affects of the administration of these drugs more than offsets the temporary good accomplished by their use. He mentions a very prominent Congressman whose life, in his opinion, was cut short by the administration of morphine hypodermically in the case of pneumonitis. Dr. Shade states that he still prescribes morphine but very seldom, as he finds it much safer to use papine. Papine, in his opinion, possesses all the desirable qualities of opium with the bad qualities eliminated. Some of the brightest minds of the present age are now being devoted to the development of a therapy in which the primitive bad effects of many important drugs are eliminated. When the therapeutic action of morphine or opium is desired, it would seem to be a safe procedure to give papine a trial.

"Bilious" Attacks or Acute Intestinal Auto-Toxemia.

(By G. W. Tobias, M. D.)

Luff, the London authority on gout, describes this disease as a "metabolic auto-toxemia, both intestinal and hepatic, which is usually followed by a deposit of sodium biurate in the joints and tissues." The individually predisposed to gout reacts differently to such various agencies as climate, food, etc.

Indigestion plays a greater role as a causative factor in the production of those symptoms attributed to execss of uric acid than is generally believed; urates, however, being merely an indi-

cation and not the essential cause of gout. The lithæmic manifestations so often attributed to disturbance of the nervous system, are primarily due to interference with normal digestion; or, rather, the nervous strain, worry and anxiety from any cause gives rise to indigestion, and in turn to gouty manifestations in some form. We have all noted attacks of gout, migraine, hay asthma, or some of the potein phases of disease betrayed the presence of an excess of uric acid, coming on after an acute attack of indigestion.

A large class of patients are troubled more or less frequently with a migraine and intestinal auto-intoxication which is not of necessity followed or preceded by gouty deposits in the articulations, although such attacks are followed by heavy deposits of urates and phosphates in the urine, these deposits being the measure of the destructive metabolism of the nucleins of the body cells, chiefly of the leukocytes, in response to the invasions of poisons or toxines. As most of the toxines setting up this destructive metabolism and consequent uric acid production are of intestinal origin, diet in gout should be regulated solely in with regard to the diminution of intestinal fermentation and putrefaction.

This form of the gouty manifestation is especially frequent with highly nervous and very active mental workers, and also amongst certain women. It usually occurs after undue excitement, worry, or excesses of the table, especially if the food contents of the stomach are much diluted with certain kinds of malt liquors or wines. Larger beer, however, I find generally tolerated and even benficial to this class of patients.

Usually the premonitary symptoms of a "billious attack" are felt on rising in the morning; there is great lassitude, muscular relaxation, want of enthusiasm; a heavy, stiff feeling of the eyeballs, and as the day advances, nausea, severe migraine, culminating in complete exhaustion, vomiting, slow pulse, cold extremities, etc.

The role of the liver in this auto-toxemia is a negative one, being inability to perform its chief normal function as a "poison filter" and to absorb or transform into harmless excretory substances, the excess of toxines brought to it by the portal vein.

The paroxysms of pain in the head in some cases are so violent that something has to be attempted to give immediate relief, but hitherto I have found purgatives, effervescing sedatives, antipyretics, hypnotics, anodynes and drugs such as colchicine, citrate of potash, etc., ineffective to arrest these conditions, until the gradual elimination of the toxines takes place, which requires from twelve to twenty-four hours. One of the great difficulties in these cases is that remedies are usually vomited immediately. I have recently been most successful with colchi-sal capsules in two very severe cases which had previously baffled all my efforts to give prompt relief during similar attacks.

1() Mrs. P., highly nervous temperament, age 26, suffers periodically from this form of auto-toxemia, generally immediately before the menses. She is a high-liver, and in spite of warnings imbibes frely at times. Previously I had never been able to relieve her, but during the last two attacks I have been able to do so promptly, by giving her one capsule (20 centigrams) of colchisal every ten minutes until six capsules were taken, by which time she fell asleep, awaking two hours later, completely free from migraine and all symptoms. This took place on both occasions.

(2) Mr. S. F., nervous temperament, age 46, has suffered since boyhood from very acute attacks of "bilious toxemia," or migraine, at which time he became almost insane with pain—so much so that the neighbors at such times became alarmed at his cries. The feeling of nausea and weariness, pain in the calves of the legs, always preceded by several hours the acute symptoms of headache and vomiting. The attacks come on apparently from no special cause and occur sometimes twice a month, sometimes once only in three months. The patient is usually able to detect the premonitary symptoms of an attack the evening before, and then abstains from food, so that the next day vomiting only brings up some clear mucous fluid. Calomel administered at night and saline purgatives in the morning never yet succeeded in preventing food,the . lcaolotrda hrdtah ratd ratdl the usual symptoms following in succesion. Diet does not seem to inhibit these attacks. The auto-toxemia in this patient is most severe, and the same conditions are repeated on each occasion. The heart's action is reduced to under fifty pulsations, the exremities become cold, even in summer, and the patient seems to be able to endure the pain only by sitting up in bed with the head held back so that the cords of the neck are violently strained; the breath is usually very acrid and peculiar in odor; while the urine becomes almost alkaline and highly charged with phosphates and urates, for forty-eight hours after each attack.

I was consulted during his last attack and succeeded in arresting the headache within twenty minutes of his taking five capsules of colchi-sal (each capsule at intervals of five minutes), when he fell into a deep sleep and awoke the next morning perfectly well and refreshed, although the intensity of the paroxysms and excitement caused thereby, usually made him a wreck the next day.. I have since found this treatment universally successful wherever the capsules of colchi-sal are retained a sufficient length of time to allow of their contents being absorbed.—*New York, April 15th,* 1904.

Right Prevails.—In many parts of the North and West a business custom prevails, which we are pleased to say is not found in the States in which the CAROLINA MEDICAL JOURNAL circulates. We allude to the sale of well-known and reliable medicines at cut rates by the department stores. Nor is this all. Some of these "enterprising" merchants manufacture (?) remedies, place them in packages as nearly like the original as possible. An instance of this kind was brought out in the suit, recently won by Messrs. M. J. Breitenbach Company against Seigel, Cooper Company and Thomas H. McInnerney, of New York. These people had been putting up a mixture in imitation of the justly popular Pepto-Mangan, which they labeled Pepto-Manganat and which they were selling in department stores. It is gratifying to know that the courts sustain M. J. Breitenbach Co. in their claim that the term "Pepto-Mangan" is their property and that "Pepto-Manganat" is an infringement and its use on packages containing medicine is an effort to deceive and damages were also granted the plaintiff.

Dr. J. N. McCormack, secretary of the State Board of Health, reports [illegible] cases of typhoid fever in the State during the fiscal year, with 1,579 deaths, involving a money loss estimated at $963,759.

The Clinical Application of Ingluvin

Ingluvin is the name given to a preparation made from the gizzard of the domestic fowl. Since its introduction, no remedy of modern times has attracted more attention among physicians far and near nor received higher endorsement than Ingluvin, which is now supplied throughout the world. The product occurs in the form of a soft powder of a yellowish-gray color and a faint odor. It is almost devoid of taste. A slightly bitter after-taste is left, but this soon disappears. Ingluvin is insoluble in water and the usual menstrua. It can be administered, stirred into water or milk, or in tea, coffee, chocolate, wine, etc., if no therapeutical objection exists. Its feeble taste is easily disguised. Ingluvin is also put up by its manufacturers (Messrs. William R. Warner & Co.) in convenient 5 grain tablets. The dose of Ingluvin is from 5 to 20 grains. Spread upon bread and butter it may be conveniently administered to children. Ingluvin possesses the advantage of being compatible with alkalies.

As the gizzard contains no peptic glands, the undoubted efficacy of Ingluvin cannot depend upon the presence of a digestive ferment analogous to pepsin. It has been ascertained that its virtues reside in a peculiar bitter principle which enters into its composition. It is prescribed in the same manner, doses, and combinations as pepsin.

Ingluvin is prescribed in the vomiting of Pregnancy, Dyspepsia from Uterine Disease, Colic, vomiting caused by Alcoholism, and other digestive derangements. It is likewise beneficial in dyspepsia when produced by functional inactivity. It will promptly check the diarrhœa which is caused by indigestion. By reason of its influence upon the stomach and bowels, Ingluvin is capable of marked service in cases of cholera infantum and cholera morbus.

The evidence in favor of Ingluvin in all cases of gastric disturbance is overwhelmingly convincing as to its superior efficacy over pepsin, and its use should never be neglected in any case of gastric irritability, no matter what may be the cause.

From the preceding abridged account it will be seen that Ingluvin possesses an exceedingly important sphere of usefulness. Disorders of the alimentary canal exert such a widespread influence, they are so often linked with profound general disturbances, and they are so distressing in themselves, that any remedy which demonstrates its efficacy in regard to those affections should be warmly welcomed.

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WM. R. WARNER & CO.

MANUFACTURING PHARMACEUTISTS

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BOOK REVIEWS.

CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF DISORDERS OF METABOLISM AND NUTRITION. By Prof. Dr. Carl von Noorden, Physician-in-Chief to the City Hospital, Frankfort, a.. M. Authorized American Edition, Translated under the Direction of Boardman Reed, M. D., Professor of Diseases of the Gastro-Intestinal Tract, Hygiene and Climatology Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia, etc. Part V., Concerning the Effects of Saline Waters (Kissingen Homburg) on Metabolism; by Prof. Carl von Noorden, Frankfort, and Dr. Carl Dapper, Bad Kissingen. New York. E. B. Treat & Company. 1904.

The fifth volume of this highly instructive series of small books, by Prof. Carl von Noorden, is at hand. This volume treats of the action on saline (sodium chlorride) waters on the gastric secretions in pathological conditions. He finds in numerous cases of gastric disorder, particularly in gastric catarrh, the use of saline mineral waters leads to an active and permanent increase in the production of hydrochloris acid. He also finds in hyperacidity the moderate use of saline mineral waters leads to a decrease in the production of hydrochloric acid. He states that the administration of saline mineral waters does not call for a special diet, and he condemns the ditetic schemes of the various watering places.

DOLLARS TO DOCTORS is the title of a new book of twenty-nine chapters, Treating 254 Phases of the Subject of Diplomacy and Prosperity in Medical Practice. It is the only Book on How to Succeed in the Practice of Medicine as a Business. By Nathan A. Wood, A. M., M. D., LL. D. Cloth, 272 pages; price, $2.00 postpaid. Order direct from the Author, Dr. N. E. Wood, 617 LaSalle Ave., Chicago, of the Lion Publishing Co., Chicago.

Dollars to Doctors contains 29 chapters with the following headings:

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GOVERNOR WILLIAW TRYON AND HIS ADMINISTRATION IN THE PROVINCES OF NORTH CAROLINA—1765-1761. An Account of His Services in a Civil Capacity and of His Military Carreer as Commander-in-Chief of Colonial Forces that Suppressed the Insurrection of the Regulators. By Marshall DeLaney Haywood, Raleigh, N. C. This is a nicely printed and bound volume of 225 pages and sold at $2.00.

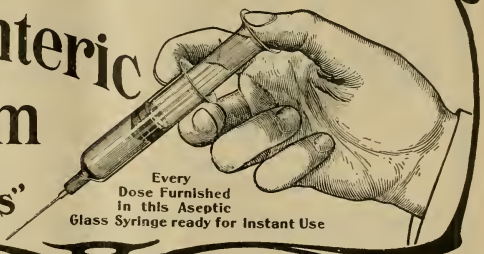
The reader who carefully peruses the carefully written pages of this historical volume will either revise his opinion regarding Governor Tryon or take issue with the author. We are inclined to the opinion that Gov. Tryon is not so black as he has been painted. The volume gives evidence on every page of painstaking search among musty Colonial records and papers by the author, in his earnest effort to learn truth regarding his subject, and the reader cannot but feel that the pages reflect the facts as they occurred and the opinion of Governor Tryon's contemporaries regarding his character and official acts. The author states in his preface: "Ever since I learned to rely more upon documentary evidence, than upon the individual opinion of writers, I have been convinced that history has dealt too harshly with Governor Tryon.

I know that my views are very much at variance with those generally accepted; but I hold as true a declaration of the old Puritan divine, Richard Baxter, who says: "As long as men have liberty to examine and contradict one another, one may partly conjecture, by comparing their words, on which side the truth is like to be."

The story of Governor Tryon's life

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PROF. SIMON FLEXNER, President of the Rockefeller Institute for Medical Research, and his co-workers, have proved by experiments extending over three years, that cholera infantum is usually caused by infection with the bacillus dysenteriæ (Medical Bulletin, University of Pennsylvania, November, 1902). During this period we have co-operated with Professor Flexner in preparing a serum for the curative treatment of cholera infantum and dysentery, and now offer, by his authority,

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occurring in children under four years of age is caused by cholera infantum, consequently, a curative serum that promises to reduce this mortality is a boon to humanity.

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853 " without " " 32.6 per cent.

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in North Carolina, and my own opinion of him will be found in this book."

The volume will repay careful reading, dealing as it does with a stirring time in our history, and presenting a carefully prepared narrative of the events as they occurred, revised and corrected by references to Colonial records.

The pages are illustrated by a full page cut of the Tryon Palace at Newbern, signature and armoral seal of Governor Tryon, ruins of St. Phillip's Church, Map of the battlefield of Alamance, and tomb of Governor Tryon.

PSYCHO THERAPY IN THE PRACTICE OF MEDICINE AND SURGERY. By Sheldon Leavitt, M. D., Chicago. Garner-Taylor Press, 1903.

However much or however ilttle store he may set upon suggestive therapy, the reader of this book cannot fail to be impressed by the earnestness of the author and his unmistakable faith in the value of this method as a means for the treatment of disease. Dr. Leavitt believes that regular medicine is doing itself and humanity an injustice in neglecting a systematic use of psychic means of cure, and in this work he calls upon the professoin to rescue from charlatans, "healers," "scientists," what he regards as a most valuable therapeutic adjuvant, supplementing and in some instances doing away with drug treatment. All thinking and observing physicians of the present day admit the efficacy of suggestoin or auto suggestion in certain cases, but they also believe that this force can influence the body to only a limited degree. Dr. Leavitt, on the contrary, seems inclined to put almost no bounds upon its powerrs. That is, however, the common fault of the enthusiast, and we are sure the author makes no claim which he does not believe he can substantiate. The book will well repay study, and we

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are convinced that the careful reader of it will find some of his prejudices against psychtherapy softened, even if he does not become a partial convert.

ELECTRO-DIAGNOSIS AND ELECTRO-THERAPEUTICS. A Guide for Practitioners and Students. By Dr. Toby Cohn, Nerve Specialist, Berlin. Translated from the Second German Edition and Edited by Francis A. Scratchley, M. D., New York, Chief of Clinic, Diseases of the Nervous System, and Instructor in Electro-

1876. 1904.

AT the opening of this Spring season we wish to extend an invitation to our friends, customers and the public in general to call on us and see the finest display of Spring Clothing, Furnishings and Haberdashery that we have ever had the pleasure of showing. Also a complete line of Hats, including all the latest styles in the celebrated Stetson Hats. ¶ Goods sent on approval returnable at our expense.

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Diagnosis and Electro-Therapeutics University and Bellevue Hospital Medical College; Consulting Neurologist to the Home for Incurables, etc. Eight Plates and 39 Illustrations. Funk & Wagnalls Company, New York and London. 1904. 280 pages. Price, $2.00.

The translation of Dr. Toby Cohn's Guide should prove of great service to physicians. It gives concisely all that is important in electro-diagnosis, and in electro-therapeutics all that is of positive value. It places electricity exactly where it belongs in a physicians armamentarium, as a curative agent. It will commend itself because of its electric commend itself because of its excellent plates, its precise and very thorough explanation of the method of investigation and how to make an electrical diagnosis, and the careful instruction it gives for the proper use of electricity as a therapeutic agent. It presents so many good features in such an admirable manner that it should readily fill in this country the same place it has filled in Germany.

FINANCIAL LEGERDEMAIN. How People's Savings are at the Mercy of "Frenzied Finance."

"In telling the Story of Amalgamated," says Thomas W. Lawson, in the first instalment of this article in *Everybody's Magazine* for July, "I shall describe such parts of the general financial structure as will place my readers in a mental state to comprehend the methods by which the savings they think are safely guarded in the banks, trust and insurance companies, are so manipulated by the votaries of frenzied finance as to be in constant jeopardy. I will show them that while the press, the books, the stump and our halls of statesmanship are full to overflowing with the whys, wherefores and what-nots of 'tariff,' 'currency,' 'gold,' 'silver,' and 'labor;' that while the people imagine they understand the system by which speculation and invesments are controlled and worked, and that the causes and effects of this system are at all times get-at-able by them through their bankers and their brokers, there is a tangible, complicated, yet simple trick of financial legerdemain, operated twenty-four hours in each day in the year, and with the press, the books, the politicians and the statesmen never touch upon—a trick by means of which the savings of the people and the publis funds of the Government, whether in the national banks, savings banks, trust or insurance companies are always at the absolute serpeople and the public funds of the Govzied finance."

Dr. N. S. Davis, first editor of *Journal American Medical Association,* died recently.

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MEDICAL NEWS AND ITEMS.

(Clipped largely from Medical Age.)

The Chicago Board of Education has voted to establish medical inspection in all schools.

Bacilli and germs will form the interesting exhibit of Dr. M. Miyajima, a noted Japanese scientist, at the World's Fair.

Dr. William B. Pritchard, formerly of Charlotte, has been appointed visiting neurologist to the City Hospital, New York.

It is announced at the Navy Department that it is the intention of Surgeon-General Rixey to provide a large hospital for the naval station at Charleston.

Dr. Max Einhorn's bood on Diseases of the Stomach has been translated into the Japanese language. This makes the fourth language this work has appeared in.

President Roosevelt has issued an order directing the Japanese system of wrestling to be introduced into the Naval Academy, as an addition to the system o fathletic training in use there.

The Hygea, Dr. J. Allison Hodge's hospital in Richmond, will be closed during July and August, for enlargement. During this time the Doctor will use the Virginia Hospital for his patients.

Dr. Walter Lindley, the editor of the *Southern California Practitioner,* has recently been elected Dean of the Medical College of the University of South ern California. This Los Angeles school is now entering its twentieth session. Dr. Lindley was one of the organizers of the school and is Professor of Gynecology of that instituption.

In the London *Lancet* Dr. R. A. Lucas describes three cases in which cancer was apparently cause by the friction of the pectoralis major on the edge of the corset. Each case occurred on the right side in a woman whose occupation caused much use of the right arm.

According to the reports of spies, the Japanese troops in Korea have been ravaged by various diseases. One of these diseases, called "imbion" is a kind of intermittent typhus. Another, called "souda," which has not yet been studied by European doctors, produces premature senility. The patients lose their teeth, become extremely weak, and the nails are twisted back on the fingers .

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Just Waking Up

An American Professor of Chemistry says: "Late investigations show such variations in the active-principle content of the barks, berries, herbs and roots from which our usually-used medicinal preparations are made, that 95% of the so-called galenical medicines can but be so unreliable that definite therapeutic results by their exhibition cannot be produced."

Hare, Practical Therapeutics, says: "If a census could be made of those who die annually from the use of drugs which are impure or useless from weakness, the writer believes that a most alarming array of figures would be presented. For many years this was unavoidable to a great degree because our knowledge of the active-principles of drugs was deficient. At present these difficulties have been largely overcome."

Speaking of variability in preparations, Dr. Hare says that one sample of tincture of nux vomica "contained twice as much strychnine and brucine as it should, and had twice as much solid residue." On the other hand, another tincture of nux vomica contained only a trace of alkaloids, but had much inert solid residue. All these disadvantages Dr. Hare suggests may be avoided by using assayed goods or "the physician should employ the alkaloids in granule form." Concluding he says, and truly: ***"A poor drug to the physician is worse than a rusty knife to the surgeon."***

A LOGICAL DEDUCTION

Is it not a logical deduction, from this arraignment of the crude galenics that the active principles should be adopted in the case of every drug where the active principles have been isolated? And as these active principles are definite preparations, should there not result from their use, accurate, definite, constant results?

If you are interested, write for a complimentary copy of ABBOTT'S ALKALOIDAL DIGEST, a brief review of the means and method of active-principle practice. Samples will be sent you.

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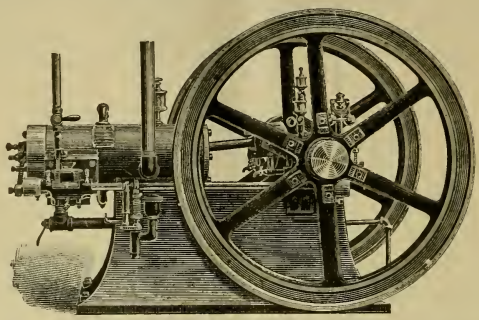
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Suit for Typhoid Damage.—An association has been formed in Butler, Pa., to bring actions for damages against the water company, the damage having been caused by the typhoid epidemic which lately ravaged that town, and the allegation of the complainants being that it was the result of negligence on the part of the water company in failing to protect the sources of its water and to maintain the purity and potability of the water it distributed.—*New York Times.*

The City City Council of Paris has yielded to the pressure brought to bear by the medical profession and has decreed that the most ancient part of the old Faculte de Medecine in the Rue de la Bucherie shall be set apart as a historical monument. The property, says an exchange, was bought by the city eight years ago for $60,000, but nothing further has been done. The building will need considerable restoration before it can be utilized as a museum and library, which is the present plant. Parts of some of the buildings date from 1369, and other parts from 1499.

An exchange says that a patent has been issued for a process discovered by Dr. George T. Moore, of the Department of Agriculture for the production of bacterial cultures employed in inoculating soils for the successful cultivation of clovers of all kinds, alfalfa, soy beans, cow peas, and many other similar members of the legume family. The patent is given to the people of the United States forever in effect, the object being to forestall any effort to patent such a process, and by that means circumscribe the efforts of farmers to improve their soils by raising leguminous crops.

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CATALOGUE — 100 PAGES — ON APPLICATION.

The susceptibility of the Chinaman to the plague is provided by the fact that China and Mesopotamia were the two great world centers of the disease before India became infected. For the past forty years plague has been epidemic in the mountains of Yuman, and there was a virulent outbreak there in 1871-1873. In 1894 there was a severe epidemic in Canton, which is said to have caused 100,000 deaths, and spread in the same year to Hong Kong. It is from Hong Kong that the infection is said to have spread to Bombay, which was just catching Calcutta at the time in the race to be premier port in India. Since then Calcutta has gone ahead, and Bombay has hopelessly receded, owing to seven years of plague.

An exchange says: "As the anthropoid apes almost inievitably succumb rapidly to tuberculosis when imported into Europe, a project has been formed to seek them in their native haunts to carry on the research in regard to their inoculation with syphilis. An expert bacteriologist will be sent to Borneo or Sumatra with facilities for the search for an efficient antitoxin serum against syphilis, utilizing these apes for the subjects, if sufficient funds can be raised for the purpose. Metchnikoff, of Paris, and Lassar, of Berlin, are the moving spirits in the project. Each of them has had remarkable success, they think, in their inoculations of chimpanzees, as duly chronicled in these columns in the last few months."

A Restful Location.—Klonteska Inn at Banner's Elk, Watauga County, N. C., is located on a spur of the Beech Mountains, facing the stern, yet beauti- Grandfather Mountain. The elevation is 4,300 feet, nearly 2,000 feet higher than Asheville. The name is from the Indian tongue and means pheasant, and many of these game birds can be found in the shady coves of the grand old Beech. A good wagon road winds up the side of this mountain, from the summit of which magnificent views of this mountain region can be obtained— of the Grandfather in front and the wild mountain region of Tennessee on the west and Virginia to the North. The village of Banner's Elk lies at the foot of "The Beech" and is a pictureque mountain hamlet, contain a hotel, post-office, stores, churches and a Presbyterian High School. The Elk River is the home of the rainbow trout. Into this river flow several streams from the Grandfather and these are peopled by the mountain or brook trout. The Klonteska Inn is presided over by its genial proprietor, Dr. Jennings, and those of us, who have been fortunate enough to enjoy its table and surroundings will always yearn for a return trip. This section has all the natural advantages found in this altitude of North Carolina, but the table at Klonteska is found *nowhere else.* The writer speaks from an experience of three summers, and can assure any seeker after rest, good water, cool, balmy air and a good table that these can all be found at this resort.

Quinine, which was advanced February 16 to the extent of two cents an ounce, is likely to go still higher, in the opinion of some men in the trade, while others do not look for any further advance. A report has been circulated, says an exchange, that the Russian government is negotiating in European centers for large supplies for its army and navy. A representative of a prominent New York firm has stated that war is not likely to have any immediate effect upon prices of quinine. The soldiers now in the field for the most part were in military service before hostilities began, and were consumers of drugs. The exposure of men to campaign hardships may call for the use of somewhat larger quantities of the drug, but this additional amount will have little influence on the market.

Statue to Dr. William Elias B. Davis.—The memory of Dr. William E. B. Davis, late of Birmingham, Ala., will be appropriately perpetuated by the erection of a monument by the Southern Surgical Gynecological Association, of which Dr. Davis was the originator as well as founder. He not only conceived the idea, but organized the association in all its details and served as its secretary and executive officer for thirteen years. The association does well in thus testifying its appreciation of this distinguished physician, whose memory will live in spite of granite or bronze.—*Buffalo Medical Journal.*

The statue will be made by G. Moretti, who was the designer of Vulcan (the Colossus iron man which represents Birmingham district at the St. Louis Exposition) and will be in bronze, 7½ feet high, standing upon a granite pedestal 9½ feet high.

DR. C. A. MISENHEIMER,

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This distinction is unique proof of the unapproachable superiority and excellence of "Sander & Sons' Eucalyptol," and we beg the profession to discriminate between the mercantile eucalyptus [wood-oil] so often fraudulently dispensed in place of our "Eucalyptol."

Medical syndicates have long since verified and established the difference in properties and quality, and class these mercantile oils, now principally in use for mechanical purposes, among the turpentines, unfit for internal medication. The characteristic difference with these mercantile oils consists: "in want of pungent odor; in the alcoholic thin and mobile appearance, being reduced in specific density through the presence of acids; in the taste, the result of the contracting tendency of resins and tannates."

We courteously advise the readers when ordering to apply to our agents, the Meyer Bros. Drug Co., St. Louis, Mo., who furnish one original package [one ounce] on receipt of one dollar. These packages carry literature comprising numerous reports of Physicians residing in the States, on the most gratifying services derived from the use of our product.

So says Dr. Baron Franks, Boston:

"The value of this medicine is very little known. Its advent ought to be hailed with enthusiasm, and I feel confident that it will be the most effective remedial agent in pharmacological science."

Many others make utterances of the same nature. To sustain the position acquired through strictness and punctuality in the process of production, we trust and hope the profession will assist in eliminating spurious counterfeits and in checking dishonest dealing.

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Does not cause Inflammation.

Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy:

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis: gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr. Osmon Royal, under date of June 4th, 1903, writes:

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E. V. Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

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Typhoid Fever.—(*West. Med. Review.*) Hogan calls attention to the usual symptoms on which the diagnosis depends. The inability to abort. The necessity for prophylaxis. The failure of internal antiseptics to accomplish good. He concludes as follows:

1. The typhoid fever patient should be kept in bed in the recumbent position and not allowed in the upright position for any purpose. 2. He should be nourished on a liquid diet, of which milk is the type. 3. He should have his nourishment regularly and should be encouraged to drink water at regular intervals. 4. An aim should be made at intestinal antiseptics and the digestive organs kept in as good order as possible. 5. For the effect on the kidneys, the pores of the skin and the general condition of the patient, the sponge bath should be used; and last, but not least, the typhoid fever patient should not be drugged too much.

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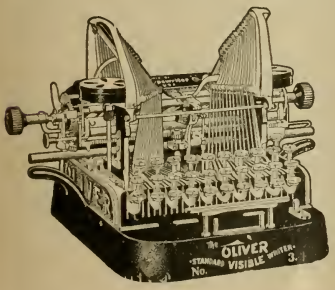
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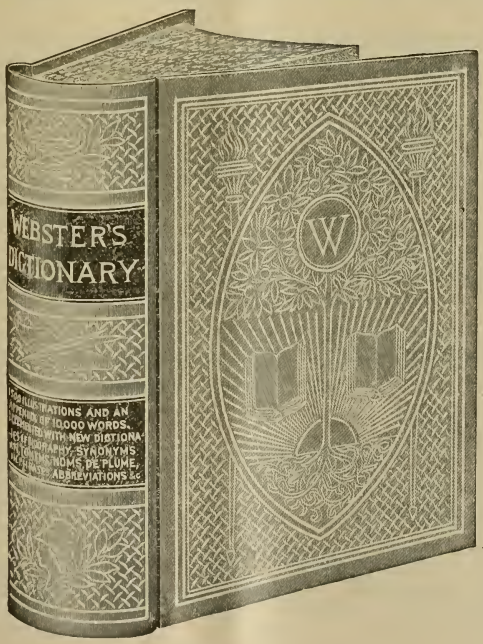
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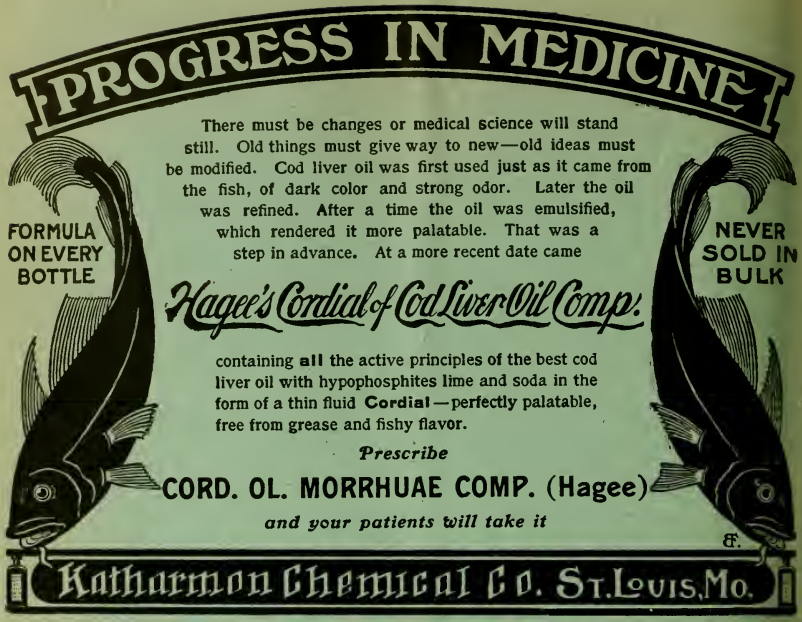
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ORIGINAL COMMUNICATIONS.

The Treatment of Prostatic Hypertrophy.

By Lewis C. Bosher, M. D., Richmond, Va., Professor of Practice of Surgery and Clinical Surgery, Medical College of Virginia.

In discussing the treatment of chronic prostatic enlargement, the palliative as well as the radical measures used for relief should receive our attention. A prostatic patient should be instructed to avoid any and everything (as exposure to cold or draughts, getting the feet wet, improper or insufficient clothing, etc.) that would tend to provoke prostatic congestion. Every source of irritation should be removed from this organ. All excesses, whether "physical, mental, sexual or alcoholic" will be damaging to the enlarged prostate, and, therefore, should be avoided. Moderate exercise in the fresh air will be of benefit and should be advised.

The diet should be light and of a digestible character, with a minimum quantity of meat—vegetables, cereals and milk being preferrable. Acid fruits, strawberries, asparagus, tomatoes and grape-fruit act injuriously to the injured organ. Champagne and malt liquors should be avoided, whisky and gin being permitted when alcoholic stimulants are essential or necesary to health.

By administering proper laxatives as necessary, constipation should be combatted and by giving water freely to drink, the urine should be rendered bland and unirritating. No drugs have any beneficial effect in reducing the prostatic enlargement itself, though the use of antiseptic medicines, such as urotropin, helmitol, salol, etc., will be found valuable adjuvants in prostatic hypertrophy, as well as in all surgical diseases of the genito-urinary tract.

Acute retention of the urine caused by hypertrophy of the protate, should be relieved by the introduction of an

Read before the Richmond Academy of Medicine and Surgery, July 12, 1904.

aseptic crude catheter, silver catheter with proper length and prostatic curve, or, as a last resort, by suprapubic aspiration. A tunnelled catheter passed over a filiform bougie can be used when a stricture complicates the hypertrophy. The often overlooked "retention with overflow," causing the patient to feel that he is successfully emptying his bladder, should always be looked for and receive our careful attention. To avoid acute congestion of the urinary surfaces and frequently shock, chill, fever, etc., that often follow complete bladder evacuation, this viscus should not be completely emptied in a first catheterization.

The initiation of "catheter life" in a patient suffering from hypertrophy of the prostate would, as a rule, better be delayed until the question of a radical cure has been submitted to your patient, and is refused or not advised by reasons of conditions precluding a radical operation. Should, however, the catheter become necessary, its use should be regulated by the amount of residual urine and by the amount of urinary disturbance the patient suffers. The residual urine being less than two ounces, no catheterization, as a rule, will be required. The residual urine reaching from two to four ounces will give rise to nocturnal symptoms, and, therefore, should be removed at bedtime with an aseptic catheter. When the residual urine becomes increased from four to six ounces, the use of the catheter morning and night will be required to afford the patient relief. Later, the number of catheterizations will have to be increased to four or more times daily to control the symptoms, according to the amount of residual urine and the amount of discomfort experienced. An intelligent patient can be taught to properly sterilize his catheter and to introduce it systematically and with gentleness and skill.

The importance of cleansing the catheter both on the inside and outside, as a regular practice before each introduction, as well as the necessity of keeping it in a carbolic acid or other antiseptic solution until needed again, cannot be too emphatically impressed upon our protatics. To avoid infection during catheter life, urotropin or some other genito-urinary antiseptic should be regularly administered. To escape cystitis, patients using the catheter regularly should have their bladders irrigated frequently with hot solutions of boric acid.

Cystitis complicating prostatic hypertrophy is best treated by irrigation of the bladder with large quantities of a weak solution of nitrate of silver, protargol or permanganate of potassium. Obstinate cases of cystitis failing to be relieved by irrigations, will require bladder drainage. In addition to regular catheterization and regular flushing out of the bladder, sometimes considerable relief follows the introduction of large sounds, which serve the purpose of dilating the prostatic urethra.

In advising our patients as to the best operative measures to be considered for the relief of prostatic hypertrophy, the following should be named: A palliative suprapubic, or perineal cystotomy for drainage; the Bottini operation, and a suprapubic or perineal prostatectomy. The palliative operation of suprapubic cystotomy allows of free inspection of the bladder cavity (from which a calculus may be removed, if found), and also permits thorough drainage. When a catheter cannot be used, or where there is a persistent cystitis not relieved by irrigation, or when a patient refuses a radical operation or one is not safe, vesical drainage can be

established with often marked relief to the sufferer. It can be performed under cocaine anasthesia, and may be undertaken as a preliminary step to the performance of a more radical operation later, as I have repeatedly done with entirely satisfactory results. Following suprapubic drainage in prostatic hypertrophy, I have seen voluntary urination restored.

Iliac ligation, castration, vasectomy, angio-neurectomy and similar measures for the relief of hypertrophy have not proved satisfactory and are generally condemned. Temporary relief may be observed as following these operations, but hardly radical cures.

The Bottini operations consists in burning a groove in the enlarged prostate with a galvano-cautery introduced through the urethra. Chetwood's operation is a modification of Bottini's. He first performs a perineal cystotomy and cauterizes the obstructing lobe with the galvan-cautery introduced through the opening in the perineum. Chetwood claims thorough drainage as an advantage in his operation, over the Bottini method, and also that prostatectomy may either substitute or supplement this operation, provided that the enlarged gland be found not suitable for cauterization. The Bottini operation is especially adapted to the small, hard fibrous prostates and where there is a decided bar at the neck of the bladder. This operation is also to be advised should the patient's condition be such as to expose him to shock or post-operative pulmonary complications from prostatectomy. The Bottini also has the advantage of being readily performed under local anesthesia, and on the patients too far advanced in years for a safe prostatectomy. In certain well selected cases and in skillful hand, the cautery method is followed by excellent and permanently good results.

In my opinion, the Bottini is an unscientific, inaccurate and often dangerous procedure, inasmuch as one must necessarily work in the dark, must have imperfect drainage, and, unless in the hands of one who has had considerable experience with the operation, the most unsatisfactory and alarming results are apt to follow. Death from suppression of urine, sepsis, hemorrhage and pulmonary emboli have been reported by a number of surgeons as following the Bottini method. Again, it often becomes necessary to repeat the operation in order to obtain permanent results.

Cystoscopy, to determine the nature of the local conditions, is of special value before the performance of either a Bottini or a prostatectomy, being really necessary for the performance of an intelligent cautery operation. It is claimed that in at least a third of the cases of prostatic hypertrophy, the tumor cannot be made out with the finger in the rectum; and in such cases the cystoscope will add its value to the diagnosis by revealing the general appearance of the gland, the presence of a medium lobe, a trabecular condition of the bladder or a complicating condition of vesical calculus. The cystoscope, however, should not be used indiscriminately, it being like all urethral instrumentation, dangerous in advanced pyelitis and pyelo-nephritis.

The now generally recognized surgical treatment in prostatic hypertrophy and the one from which we may expect satisfactory and permanent results, is prostatectomy. No one method for performing prostatectomy can be selected to apply to all cases. In preparing a patient for the operation, the condition of the lungs, heart, arteries and kidneys should be carefully looked into. The

age of the patient need not be considered, provided his general condition be such as to justify a major operation. Quite a number of deaths following prostatectomy have been traced to the anesthetic rather than to the operation. To do away with the danger arising from a general anesthetic, spinal anesthesia after the method of Morton, has been employed by a number of operators. Some have performed suprapubic prostatectomy under nitrous oxide anesthesia.

After having thoroughly examined the patient and satisfactorily outlined the enlarged prostate by rectal examination and by the cystoscope, the most important question to settle is the selection of the best route for enucleation of the gland. In the greater number of cases, the perineal route unquestionably offers the largest number of advantages. The prostate is easily reached, it is directly under the eye of the operator and the exposure offers a better opportunity for satisfactory enucleation. The opening in the bladder is at the most dependent part and gives the shortest and best drainage, and, therefore, there is less danger of sepsis. There is, too, a shorter confinement to bed and, therefore, prompter convalescence.

With a median, semiluar, or inverted Y incision, the operation of perineal prostatectomy may be performed after the technique suggested by Albarran, Murphy, Young or Nicoll. Young has attempted by his method to preserve the ejaculatory ducts, and, therefore, to ward off sterility. Enucleation of the prostate is greatly favored by making use of some device like Parker Sims' rubber inflatable balloon, Young's prostatic tractor or Murphy's hooks to draw down the gland into easy reach.

The suprapubic method of prostatectomy may be performed by the method of Fuller or Freyer. It is claimed that the suprapubic method is open to many objections, viz: that the shock is greater, that the drainage is uphill and against the force of gravity, that the floor of the bladder is extensively lacerated, that hernia sometimes results and that the mortality is greater. Notwithstanding these criticisms of suprapubic prostatectomy, some of which are of value and others not, it has a well defined place, and in properly selected cases excellent results follow the operation. In cases of a very large middle lobe, or when the whole gland projects prominently into the bladder, the gland is very quickly and satisfactorily enucleated by the suprapubic route. Calculi complicating prostatic hypertrophy can also be readily removed in this operation. By buttonholeing the urethra, as advised by Fuller, perfect drainage can be established and satisfactory irrigation of the bladder carried out.

In two of my recent cases prompt convalescence and entire relief followed enucleation by the suprapubic method. Both patients were over 60 years of age. In the last case, the patient had not passed urine without the use of a catheter for over five years. He sought admission to the Memorial Hospital because of his difficulty in the introduction of the catheter by reason of false passages made in the urethra from previous catheterizations. I made a cystoscopic examination and found a markedly enlarged, intravesical, prostatic projection consisting of three lobes, and a trabeculated condition of the bladder. Only a few minutes were consumed in enucleating the gland after performing the suprapubic cystomy. The patient made an excellent and uneventful recovery. He was in my office only a few days ago, and stated that he felt like a new man. He claimed that he passed

the night without disturbance, and urinated at intervals of three or four hours during the day. He has been able to return to his work on the farm, and is now performing a full day's work, as formerly.

The dangers likely to occur during or after a prostatectomy are from hemorrhage, injury to, or rupture of, the rectum, sepsis, uremia, shock, postoperative pulmonary complications, and the anesthetic. The danger of sepsis and uremia may be greatly minimized by providing for free drainage, flushing the kidneys or administering water freely, and using saline infusions as necessary. Hemorrhage is not likely to occur if proper care is given to ligation of bleeding vessels, and if proper use is made of gauze packing. When the operation is performed hurriedly, or if the gland be of large size, or if adhesions be present, tear or injury to the rectum may occur. A tear occurring, it should at once be sutured from the perineal side.

Since local anesthesia has been substituted for general anesthesia, especially in patients advanced in years, the mortality of prostatectomy has been markedly decreased.

According to Watson, the largest share of danger from sepsis belongs to the Bottini operation, and the greatest risk from shock and pulmonary complications is met with in suprapubic prostatectomy.

From statistics of operations performed by prominent men by the three methods now generally recognized in the treatment of prostatic hypertrophy, recently collected by the same surgeon, the Bottini gave a mortality of 4.5 per cent.; perineal, total removal, 2.9 per cent.; suprapubic, 8.6 per cent.

I do not think that any one method should be selected by the surgeon to meet all cases of prostatic hypertrophy, but that great care and judgment should be used in the selection of the case. Cases not suited to prostatectomy or the Bottini, may be given great relief and prolongation of life by the performance of a palliative operation for drainage.

717 Franklin Street, East.

Cholera Infantum.

By W. F. Chenault, M. D. Cleveland, N. C.

Mr. President:

I have selected for my subject a disease most common to the hot summer months, namely, Cholera Infantum. Who can enter the sick apartment and behold the feeble babe feeding on its mother's milk which flows through her generous breast, without an aching heart and a pitiful eye. How are we again to face the difficult problem, how best to fight against that dreadful and fatal disease of childhood? The question then arises how can we best shield those little ones from the ravishes of this disease? I shall not attempt in this paper to discuss the etiology and pathology of this disease. I shall confine my remarks principally to the prevention and treatment. Nevertheless, I firmly believe that unless we have some knowledge about the etiology and pathology, our treatment cannot be scientific. Hare in his Practical Therapeutics says, the exact nature of cholera infantum has not yet been proved, but analogy points strongly to its being a toxic condition produced by the absorption from the intestinal tract of some special toxin originating in fermenting or decomposing food. The prolonged heat of July and August appears to be a distinctly predisposing factor. Infants living under faulty hygienic conditions, and supplied either with an injudicious dietary or with milk food in the preparation of which due

care has not been taken, appear to be among those most prone to attack. There can be no question whatever of the incomparably greater value of the breast milk over any method of artificial feeding, both as regards the chance of life and the perfection of the infant. It is impossible to lay too much emphatic stress on this point, and those mothers who, from reasons of indolence, fashion, and what not, refuse to perform this sacred duty to their children, cannot, in many instances, be considered guiltless of the weakness, disease, and even death, which their wilful neglect may entail. It is the duty of physicians to discountenance strongly the pretexts of fashionable mothers to obtain a wet nurse, that they may rush back into the giddy scenes of frivolty and pleasure. Can a woman forget her sucking child? It seems, in these days, that not a few, but multitudes of women, can and do forget them, and elect rather their own selfish gratifications than the life-long good of the helpless babes intrusted to their care. This is not the type of womanhood which has earned for women their character for nobility and self-sacrifice. No woman should willingly delegate to another the duty of nourishing her own offspring. No food whatever agrees with a child like its mother's milk. At the same time there are cases in which suckling is evidently beyond the mother's strength, or it may be unadvisable by reasons of some hereditary taint, as phthisis, syphilis, cancer, epilepsy, etc. Otherwise the child should be put to the breast within a few hours of birth; the uterus is thereby induced to contract more thoroughly, and the child gains the benefit of the "colostrum," which saves all necessity for castor oil. The child should be applied alternately to each breast at intervals, at first, of an hour and a half to two hours, gradually increased to three and four hours, as the child grows older. As a rule, no artificial food whatever should be permitted when the breast milk is good, at any rate until the sixth or seventh month. The best test of the quality of the mother's milk is the fact that child thrives or does not thrive. If there be any doubt as to the quantity of the supply the infant may be weighed before and after suckling; the increase in weight should not be less than 3 ounces, under three months, and about six ounces in an older child. If catamenia come on during nursing, or if conception occur (which is a rare event) the child will often pine and lose flesh. This seems to be, indeed, one of the predisposing causes of rickets. Statistical dren are those fed exclusively on breast tables show that the best developed chilmilk for a period of at least nine months. Probably a more severe problem does not exist than how to rear children by hand successfully, and it demands our closest and most anxious consideration.

To begin with cows' milk, it is often acid, while human milk is alkaline. This should be frequently ascertained by use of litmus paper. The cow's milk should be as new as possible, warm by preference, and it should, when practicable, be the milk of one cow. A young cow with a calf about two or three weeks old does best for a young baby. To make a bottle, say about eight ounces, of food suitable for a child under three months (of which he is by no means to swallow the whole); four ounces of such milk should be diluted with four, or, under certain circumstances, six or eight ounces of hot water (but half and half often does well), a teaspoonful or two of lime water should be added, in any case, to prevent

curdling, and a tablespoonful or two tablespoonfuls of lime water may be needed when the milk is acid, or when the child throws up lumps of curd. Such a state of things may also require the milk to be further diluted than half and half—one-third milk to two-thirds water, and lime water may then be needed. A little ordinary salt, just a few grains, may be added and some sugar of milk. The food should be given at a warmth of about 98 degrees F. The bottle should be scrupulously clean, thoroughly cleansed after each feeding, that no sour milk coagulations may, by any possibility get into the child's stomach.

Other forms of diet adapted for occasional, use or at weaning, may next be mentioned. Mellin's Food, Nestles' Food, condensed milk, and a whole list of others too numerous to mention, all have their advocates.

Nestles' milk food I have found valuable in many instances. I have known ladies who earnestly recommended it to others, from the benefit their own children had derived from its use. Nevertheless, it will not suit all cases. It is not at all easy to predicate which of those foods will prove most useful in individual cases. The Eagle is a brand, to the value of which I can bear testimony. I have seen many children almost given over, at different periods of their infancy, who have thriven splendidly as soon as condensed milk was obtained. It is certain that some children will digest and thrive upon varieties of food, which are simply deleterious to others; the powers of digestion are remarkably stronger, and the explanation of this is, in my opinion, to be found in the varieties of diatheses which even thus early assert their presence and demand and require diligent attention. It is the children of the rickety and of the syphilitic diathesis that suffer most severely from dyspepsia and weak stomachs. Therefore, by attention to the special diathesis of a given case, more valuable hints will be afforded in the pining and wasting which so often results merely from improper food being given, but also from the want of power to assimilate a quantity of food, otherwise suitable enough in character. If we should have a hot dry summer, scarcely any rain and the heat on the extreme, the result will be, as might be anticipated, an unusual mortality among little children. Perhaps no better opportunity may occur for discussing the treatment of a disease so exceedingly common and distressing. By imperceptible shades, or sometimes suddenly, the mother finds out that the little one is not thriving and unwilling to nurse. This is the very earliest prodroma of the more marked symptoms which presently appear, and that is the golden time for successful treatment. Unfortunately the common conclusion is, that it is nothing, and will pass off. True, the child is often cross, feverish all of a sudden without any cause, but he is soon pleased again ,and it must be nothing. But in addition to not thriving and fits of irritability, the mother next notices that the child is sick a time or two in the day; the bowels are a little loose, perhaps clayed, perhaps, offensive; the rest is not tranquil, but more or less disturbed, and the eyelids are a little open. These symptoms deepen in severity; the child becomes very ill; there is constant sickness, bad diarrhœa, running through many varieties—now bilious, brown, lumpy and green and offensive, watery and acid, rapidly causing intertrigo over the buttock and around the anus. The child rejects food, will take nothing, cries at the

spoon or bottle, emancipation rapidly sets in; the eye is bright, the cheeks are sunk, the fontonelle falls in, the mouth is drawn down and sore and often cracked at the angles; aphtha forms on the roof of the mouth and togue, the diarrhœa increases, then the appetite, or rather the thirst, becomes extreme; then comes the cry of the brain, the sudden shrill little cry, dying soon away, and utterly different from the moan or wail, and also more different still from the hearty, wholesome cry of a healthy baby. This is the leaden stage for treatment, and the end is usually not far away. And yet, provided that effusion has not occurred, or the mucous membrane of the alimentary canal has not been irrecoverably damaged, so that assimulation cannot take place, even yet, at the eleventh hour, what may not be hoped for if the child can be put to a good healthy breast of milk. Wonderful is it to see symptom after symptom disappear, the imminent danger changing in a few weeks to perfect and robust health. It is evident from what has been said that if the breast is so invaluable even at the eleventh hour of this condition of things, in the earlier stages the good effects must be still more certain, If a wet nurse cannot be got, or do not succeed, what is to be done? I have supposed the child feeding on cow's milk and water, and lime water and sugar of milk. Remembering that the cow's milk is often acid in reaction, and the evacuation in these cases are extremely acid, the lime water may be increased—it is useful alike against the acidity and the diarrhœa; or the cow's milk may be changed to condensed milk similarly given, or if the milk is rejected curdled, and there are curds in the motions, milk in any form must be given up.

I have found rice or barley water, with, say, two teaspoonfuls of old brandy distributed in 5-drop doses over the twenty four hours, a useful rest to the stomach for a few days, but even if these are assimilated the child will continue to waste, or, at least, will not thrive. An effort must be made to get back to milk. Here white wine whey often comes in welll. A teaspoonful of excellent sherry should be added to four or five tablespoonfuls of boiling milk, boil up for a moment or two after adding the sherry, let the curd subside and gently pour off or strain off; add a little sugar of milk and the whey is ready. Of it, a wineglassful may be given in the twenty-four hours, and it is often both well relished and agrees well. The brandy of which children soon sicken, may be replaced in this way.

Of medicines, I will recommend but few. Chalk mixtures and astringents generally are hurtful, rather than valuable. Regarding the disorder as a toxic condition, due to the absorption of a poison from the alimentary canal, our first efforts must be directed to cleaning out this tract as promptly and thoroughly as possible. For this purpose a few grains of calomel, combined with sodium bicarbonate should be given in divided doses. Following this the whole tract of the colon should be thoroughly washed out with a tepid saline solution (one drachm of salt to the pint). A warm spice poultice may be applied to the belly when pain is present; it is very soothing in effect. When restlessness and irritability of the stomach are prominent features, I have found nothing so effective as atropine; and this completes what I think it needful to say about drugs.

If a mother cannot suckle, a wet nurse is the best substitute. If possible,

she should be a healthy married young woman, without blotches or scars, whose child is about the age of the child she is to suckle, and whose child is itself healthy and free from sores. A wet nurse must not be too highly fed; she should live regularly, simply and quietly, and take daily exercise. Amongst the wealthy class there is no more common error than overpampering a wet nurse, forgetting the hardships from which she has come and amongst which she has thriven and kept her health. She is straightway made to do nothing and to eat constantly of the richest food; and then such persons are surprised that the milk does not seem to agree with the child and that the nurse looks poorly, and the like. In a general way, the simpler a child's diet is, whether it be well or ill, the better, but cases of dangerous and protracted illness ,especially amongst the children of the rich, will often tax the ingenuity of the physician to permit variety with unwholesomeness, or to coax a pampered appetite without indiscretion.

Fecal Vomiting in Intestinal Obstruction.

Original Article by A. K. Bond, M. D., of Baltimore.

The term "fecal" is sometimes misleading as applied to the matters vomited in obstruction of the bowel. In a case of the writer's of complete occlusion in lower part of small intestine by an adult the vomited matter never acquired any odor of the rectal stool (feces), but had an aroma as of the opened peritoneal cavity of a cadover. This may be what text-books designate as "fecal," but, if so, the designation is very unsuitable. "Peritoneal ordor" would be an improvement, for all students know the smell of the dissected peritoneum. In the writer's case this odor appeared first very faintly in a morning vomit of a quantity of fluid resembling bile, yet containing a small sadiment of soft brownish appearance. During the whole of this third day of illness no further vomiting occurred, until at night about a pint of brownish liquid strongly peritoneal in odor was vomited and the writer immediately summoned a surgeon for operation, which was successfully performed next day in the afternoon. There was in this case up to time of operation little indication of the gravity of the illness as described in text-books; the pulse was nearly normal, and full; the temperature about 100°. There was no very severe pain nor peristalsis. The patient lay quiet, with natural expression of countenance; and conversed without alarm about her business or other affairs. There was no abdominal puffing of consequence, nor any tumor; nor could the surgeon detect the probable location of the obstruction.

Such mild-symptomed cases may be very familiar to great surgeons; but to physicians, especially those not long in practice, they are liable to be misleading; and so I have deemed my case worthy of brief record. A green bilious vomit slightly tainted with the "peritoneal" ordor, ought doubtless to have brought the surgeon; but "fecal" in strict terms it certainly was not; and I ventured to try still the powers of a ½ drop of croton oil; castor oil having failed. It is worthy of note that while the croton oil did no good, it did no harm. The patient had a record of previous slight or partial obstructions, apparently due to duodenal congestion; and it was reasonable to suppose that this also might be overcome by medical agencies.

The operation belongs to surgical his-

tory; there was a narrowed bowel (from old adhesions) which had gotten a twist at the beginning of the illness. It may be that the gradual narrowing accounted for the tolerance of complete occlusion shown by the patient. The twisted part was intensely red, inclining to dark red. After dissection from the anterior abdominal wall, air passed freely from the inflated bowel above to the collapsed bowel below; no part of the bowel being injured in its vitality. The bowel was incised and sutured. Five weeks after operation the patient returned home from hospital, well.

SELECTED PAPERS.

Simplicity in Diagnosis and Theraphy of Digestive Disorders.

By Alfred W. Perry, M. D., San Francisco.

(*Pacific Medical Journal.*)

Prof. P. Ehrlich, of Berlin, says that: "Scientific research should restrict itself first to the simplest explanatory possibilities and not call on the more complicated ones until the simple ones have been shown to be inadequate."*

This remark of Ehrlich is strongly applicable to the diagnosis and treatment of the disorders of digestion, in which there is a great deal of what I call long distance guessing. What I mean is that the most obvious causes of digestive disorders should be sought first, and those disordered actions which are most under our control should be remedied first, before we attempt to treat the more obscure ones with at best uncertain remedies.

It will be generally admitted that the following eight acts are necessary (if not essential steps in healthy digestion:

THE EIGHT PRINCIPAL STEPS IN DIGESTION.

1. Mastication. 2. Insalivation. 3. Passage of the food out of the stomach every few minutes from the beginning to the end of digestion. 4. A 2 to 6 after each meal. 5. A 2 to4 hour passage of the food through the small intestine. 6. A proper supply of digestive juices. 7. A 20 to 22 hour passage through the large intestine. 8. An absorption of 100 per cent. of the starch, 94 per cent. of the fat, and 96 per cent. of the nitrogenous food from the intestines.

There are other steps just discovered and perhaps not admitted, such as the influence of the internal secretion of the spleen,[1] of the duodenal[2] glands, and of the suprarenal capsules on the pancreatic secretion, and upon which we will not dilate, as we know of no way of influencing them. Each step in the digestive process is directly dependent on the next previous one and to a less extent on every previous one: to attempt to influence, therapeutically, steps Nos. 4 ,5, 6, 7 and 8, before we know how steps 1, 2 and 3 are carried out, is sublimely absurd. We can only know about Nos. 1 and 2 by examining the teeth, and getting a minute history of the amount of food, its consistency, time of chewing, amount of drinks at meals, their temperature, manner of taking, during an average day.

The following table of experiments, made and published by me in 1899, shows the action of saliva on starchy tions, which are never realized in eating:

* Jour. Am. Med. Ass'n, vol. 42. p. 929.

Foods mixed and rubbed with saliva to form thin paste, kept 30 minutes at 100 degrees F.

1 Gramme.	Contains Starch — Grammes	Starch Changed to Sugar and Dextrin — Grammes	Per Cent of Starch Changed	Sugar Formed (Maltose) — Grammes
Cracker	.630	.459	72	.516
Rice, when boiled= 4.40 grammes	.850	.786	92	.885
Corn Bread	.427	.392	92	.431
Wheat Bread(French)	.430	.384	89	.443
Potatoes, boiled	.200	.152	76	.172

The next table shows the salivary action under the best man of eating:

Foods chewed soft enough to swallow, then kept 30 minutes at 100 degrees F.

1 Gramme.	Contains Starch — Grammes	Starch Changed to Sugar and Dextrin — Grammes	Per Cent of Starch Changed	Sugar and Dextrin Formed — Grammes
Cracker	.630	.422	67	.475
Rice	.850	.528	60	.594
Corn Bread	.427	.371	86	.417
Wheat Bread(French)	.430	.327	66	.369
Potatoes, boiled	.200	.111	55	.125

Any deficiency of the opposed grinding surfaces makes defective mastication; also does fast eating even with perfect teeth. Proper time for chewing 350 grammes French bread, 48 minutes. Eating dry breadstuffs without alternate swallow of liquid, or even of any soft food, insures the perfection of salivary action; by taking the breadstuffs in the form of potatoes, mushes, puddings, or soaked in soup, milk, etc., we likewise dodge the insalivation more or less.

As a result of several experiments I find that it required 48 minutes to chew and swallow 350 grammes of French bread, provided no liquid or soft food is taken at the same time. In a few cases the saliva may be defective in ptyalin; this may be ascertained by mixing 20 c. c. of saliva with 20 3. 3. of a mucilage containing 2 per cent. of boiled starch, and keeping it at a temperature of 370° C., until a drop ceases to react with a solution of iodine; this usually requires ten minutes.

Steps 1 and 2 are directly under our control.

Steps 3, 4, 5 and 7 are moderately so, though steps 3 and 4 are somewhat under our control in that the timely passage of food through the stomach is favored by warm food and drinks, fine division, and pleasant emotions during meals.

No. 6 is least under our control, and I complain that it is the custom of the general practitioner, in treating any case of digestive disorder, to assume a deficiency of some digestive juice, or in a case of an analysis of stomach or bowel contents, to be sure of it, and to try the plan of stimulating the delinquent gland or of making up the deficiency by supplying the corresponding ferment.

The objection to the first plan is that we do not know any medicine which will stimulate any gland to furnish a healthy secretion.

The objection to the second plan is that the quantities of the ferment given are physiologically absurdly small.

The secretion of saliva being caused by chewing rather dry food, it causing, likewise, the gastric secretion as shown by Pawlaw; the feebly sour chyme flowing into the duodenum, causing the formation of secretion in the duodenal glands; and this circulating in the blood through the pancreas causing the formation of trepsin, and the recent reported action of the internal secretions of the liver, spleen and supra-renal capsules upon the pancreas, form a very close chain in which drug therapeutics has a very small chance to come in.

The digestion of the starchy foods is so well provided for by the salivary, pancreatic and intestinal juices that starch rarely escapes in the feces, even in the severer dyspepsias and disorders of nutrition, and then only when diarrhea is present. I examined the stools of a number of phthisical patients in 1902, and never found starch in the stools. It is not a matter of indifference to the organism where this conversion of starch into dextrin and glucose takes place. From 50 to 75 per cent. of the starch eaten is digested in the mouth and stomach when the food is slowly and well chewed, and does not contain more than 40 per cent. water. This is shown by the common observation that many dyspeptics are cured by eating dry bread or toast, and chewing it slowly. Too little digestion of starch in the mouth and stomach seems to produce a hyperchlorhydria.

SUFFICIENCY OF SALIVA.

An adult of 63 kilos weight and taking moderate exertion requires daily 400 grammes of starch, represented by 930 grammes of French bread. If the saliva digestion of this is *nil*, it can be replaced by taking with the meals, of 96 c. c. syrupy extract of malt, or 970 c. c. of the beer-like extract of malt per diem. This is two or three times in excess of the usual doses. If lesser degree of deficiency, less malt is required in proportion.

(*Zeitschrift fur klin. Med.*, 1902.) Prof. J. Troller gave a patient a test meal, in the usual way, and the next day a similar meal through the stomach-tube. The stomach contents were removed after a like interval, and tested. The secretion after the chewed meal was found to be much richer in acid and ferments than after the unchewed meal.

The non-performance of the third step is shown by a pressure at the epigastrium, lasting more than 30 minutes after meals. This is primarily caused by a failure of steps 1 and 2, and secondly by the hyperchlorhydria, pyloric spasm, and chronic gastritis, the result of the aforesaid failure.

Step 4 fails from the same cause as No. 3. The daily use of purgatives is the usual remedy (for this condition), which is only mentioned to be condemned.

I believe that failure of the motor functions of the small and large intestines is secondary to disorders of preceding acts of digestion, except in the few cases of partial obstruction, atony of the rectum, spasm of the sphincter ani. Failure of the motor acts of the intestines can be permanently relieved, only by securing the proper performance of steps 1, 2 and 3, and by mechanical measures, coarse food with vegetable fiber, and exercise, particularly of the abdominal muscles.

The common custom of regarding every digestive disorder which is associated with constipation as dependent on the constipation is certainly simplicity

is diagnosis, but it is not an adequate explanation for the disease. The treatment by frequent (perhaps daily) purgatives is equally simple, but it does not cure, although it gives temporary relief. It does certainly impair the nutrition, and finally aggravates the original disorder. Such a simplicity is that of ignorance.

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1. Lepage and Bayless Starling, *Jour. of Physiology*, Sept. 12, 1902.

2. Hertzen, in Plunger's *Archiv. f. Physiol.*, Bd. 84, p. 115.

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Damiana (The Mexican Tea), Turnera Aphrodisiaca.

By John Uri Lloyd, Cincinnati, Ohio.

(*From Pharmaceutal Review, Vol. 22, Page* 126.)

About thirty years ago, Dr. F. O. St. Clair, of Washington, D. C., introduced Damiana to the medical profession of the United States. The botanical name was not known to Dr. St. Clair, but was afterward determined as *Turnera Aphrodisiaca*. It became my duty, in 1881, to describe the drug and its (then) sophisticant (*Aplopappus discoideus*), for the American Dispensatory, the article being published in advance by Dr. Charles Rice, editor of the *American Druggist*. I now find myself in the home of Damiana, and am enabled to supplement that paper, as well as, I believe, correct certain generally accepted popular American errors concerning the drug. La Paz, Lower California (Ba ja California), is the principal Damiana port of export, and information obtained on the ground may be considered authentic.

The Name. Damiana is the Mexican name of the plant which yields the leaf sold under the name. So far as I can discover, this name has no significance. Possibly, in days gone by, the term might have possessed a specific meaning, but more likely it is an heirloom of the Indians that inhabited the Peninsular before the Spanish invasion. Be that as it may, the term Damiana is familiar to every Mexican, but concerning the meaning and derivation of the word, all concur in that it is simply the name of the plant.

The Plant. The leaf of Damiana is now too familiar a drug to necessitate detailed description, the fragrant, olive-green leaf being well known to pharmacists. The plant is a low shrub, the bushy head of which is prone upon the ground, from which descends the guarded, often twisted root stem, and spring the coarse twigs. This root is tough, hard, the central part (about one-third) being brown, the remainder yellow. The main root stalk averages an inch or more in diameter, from which project tough side roots the size of a lead pencil, gray externally, but yellow within. From extreme to extreme, a damiana plant may average two to four feet, root measurement, but is less in depth. The tough stems make a scraggly bush, two to three feet high. In the dry season, which includes most of the year, the tough, brittle root seems to be nearly devoid of moisture. It may even be seemingly as dry as the dust about it, as is true of the specimens now before me, but I am told that this sapless specimen of vegetation, gray and forlorn as is the hot dry sand and soil about it, on the first touch of rain, will put forth a mass of foliage, and with wonderful activity will become a living bush, which, when the few days of rain are over, dries again in the sand, and slumbers through the long season

of heat and dust. Cattle and other animals are fond of Damiana, and it is asserted that a peculiar, sweet flavor is imparted to the flesh of such creatures during the Damiana season.

Damiana, I am told, is practically confined to the lower part of the Peninsula of Lower California, from which, mainly from the port of La Paz, it is exported, the larger amount now going to the United States. Its habitat, even here, is in the foot hills inland, the main supply coming from forty miles west of Todos Santos, on the Pacific shore. It grows in patches or clumps, with spaces, sometimes of considerable size, between the bunches. It is gathered by the country people, and for exportation is packed in bales of convenient size, coarse coffee sacks being usually employed. I find in local use, small square bales in calico casing, each holding two litres, but it is general retailed loose by grocers ,as tea is sold in America. The difference in the quality of Damiana is very great, owing both to care in curing, and to its condition when gathered, as well as to its age, for by age it loses much of its aroma and fragrance. The Mexican is particular concerning this latter point, and highly values a freshness in quality. It should be nearly devoid of stems, of a lively, olive-green color, slightly astringent taste when chewed. As found in commerce, the small leaf is much broken. When gathered in the flowering season, it is in very best condition, and is most highly valued by Mexicans when the flowers are present. They prize the flavor in this mixture of leaf and blossom.

SOPHISTICANTS. (ASH DAMIANA.)

The only plant that is here confused with Damiana is a related shrub of similar appearance and growth. Its leaf resembles Damiana in contour, and is possessed of a similar odor and taste. It differs in general in that it has a more grayish (ash) color (due to a coat of silky down), olive-green color of the true, crisp leaf. This plant is not only downy to the touch, but the leaf, leaf-stem, and buds are also pubescent, the leaf being thick and leathery, as contrasted with the brittle, thin leaf of true Damiana. This species is found abundantly within twenty miles of La Paz, while the true species is not abundant east of the foot hills that center the peninsula. This ash species is not used by the Mexicans, and yet, by one inexperienced, it might readily be taken for Damiana. I have discovered that the leaf of this plant has been largely sent to the United State, the gentleman giving me this information calling it "Bastard Damiana." Although it should be considered a sophisticant, its sensible properties so nearly resemble Damiana as to indicate that pharmaceutical preparations can not be readily differentiated.*

DAMIANA ROOT AND SHRUB.

I am reliably informed that an attempt is being made to put the root and shrub on the market as a drug substitute for the leaf. Owing to its weight it will be a cheap sophisticant, and may serve the purpose of a cheap substitute. But I cannot discover any of the qualities of Damiana in either the root or shrub. The final result of such procedure (owing to the restricted locality in which damiana grows), will be to exterminate the plant, and increase the

* I have taken steps to obtain the different species of shrub, and when their botanical names are determined will supply this deficiency. A dealer in Damiana assures me that another "Bastard" species exists, intermediate between those I have described.

price of Damiana. The Mexican Government should at once take steps to prohibit the exportation of Damiana root, and thus preserve the industry, and protect this important Mexican tea.

MEXICAN USES OF DAMIANA.

Damiana is the native Mexican tea, and is used exactly as tea is employed in the United States. Although its use is now largely confined to the poorer classes, it is a favorite beverage throughout the Peninsula, and also, I am reliably informed, elsewhere throughtout Mexico, although this latter statement I have not personally verified. It may be likened in this respect to our domestic sassafras, which is yet used as a beverage, in a limited way, in rural districts, in many sections of the United States. Damiana is consumed in Mexico as a stimulating beverage, and is not as a drug, although its qualities are both soothing and stimulating. That it may have, occasionally, an aphrodisiac property, in Mexican view, is evident from the fact that in one case a Mexican who met Americans often, ascribed to it that character. But I find, after patient and particular investigation in the Mexican home of Damiana, that it is universally served as tea, to men, women and children alike. I am therefore inclined to believe that a touch from American advertisements, or American statements. Its repute here is that of a pleasant, gentle stimulant, and it is also employed as a hot drink when the menses are suppressed. It is also used in colic, the statement being that a strong, hot tea of Damiana will bring quick relief. This statement I have also verified from a heavy native exporter of the drug. The fact that Damiana tea is used so extensively, demonstrates that it is harmless, while its employment for persons of both sexes and of all ages indicates that it is not considered a drug exclusively for purposes such as are asserted to be its reputed qualities in American medicine. I am therefore inclined to accept without reserve that the reputed qualities of this drug, as accepted in America, are not based on its Mexican use or reputation.

Damiana is a fragrant, slightly astringent, gentle stimulant or tonic, which in its habitat serves a useful purpose. Its long continued use is not followed by nervousness, as is the case with tea and coffee drinking. I made careful and exhaustive inquiries to ascertain if any ill effect followed its habitual use, and found none whatever. On asking for a cup of Damiana tea at the hotel where this article is written, it was served me without comment, the proprietor stating that he kept the leaf constantly on hand, and considered it a harmless beverage, adding that some people drink it exclusively. I found it not unpleasant to the palate.

And now the question may be asked, is it possible that so many American physicians who have prescribedDamiana have erred in their opinion of the drug? In reply it may be stated that it is not unlikely that, in some instances, a gentle, aromatic stimulant like Damiana may accomplish aphrodisiac effects. In my opinion, however, the shot-gun method of prescribing Damiana has maintained for this innocent drug its chief reputation in a field where error originally placed it. As a rule, Damiana is associated in prescriptions with phosphorus, nux vomica, strychnine, iron compounds, and such powerful agents as these, where its gentle companionship is dominated by its powerful

associates. Or, the name "Damiana" is used as a trade mark term for proprietary preparations in which the other ingredients are concealed. Few physicians employ it alone, and such therapeutical authorities as I know to have investigated it in a pure condition, assert its inefficiency as an aphrodisiac. Like the harmless spreading viper, to which a general public has erroneously ascribed most virulent attributes, but which is almost helpless and is perfectly innocuous, so Damiana has been broadly heralded as a remedy in a field where its innocent qualities forbid it a conspicuous place.

RESUME.

Damiana is a Mexican shrub, its habitat being on the peninsula of Lower California, inland from La Paz. It was introduced to American medicine under a misunderstanding of its nature. It is not a Mexican drug, but a general beverage. Its qualities reside in a fragrant leaf, yielding to hot water a pleasant, harmless, tea-like beverage which, so far as history determines, has been consumed from all time by the Mexicans, and is still so employed by all classes, men, women and children alike.* It is a gentle stimulant or tonic, kindly in action, pleasant to the taste, and acceptable to the stomach. Its medicinal qualities are mainly restricted, in Mexico, to cases where a gentle stimulant may be effectual, as in suppressed menses, in which it is desirable to administer a hot drink in connection with a grateful aromotic that will not disturb the stomach. In other words, Damiana is a homely, domestic remedy, innocent of the attributes under which, in American medicine, it has, for a quarter of a century, been forced to masquerade. Its American field is now restricted, but in its true position the use of Damiana may be broadened. A freshly made tea of prime, recent Damiana herb, when it can be procured, is perhaps the most desirable form of administration, or a concentrated cordial representative of the drug, of exceptional freshness and of prime quality, palatable as possible, made to carry the full qualities of Damiana.

La Paz, Mexico, February 10th, 1904.

* I have met the very best in society, who drink Damiana tea through choice. The poorer classes use it almost exclusively.

Modified Typhoid Fever.

The classical description of typhoid fever as given by our college professors and in the text-books is not found in every day practice, says Stenrett in *Medical Summary* for June, 1904. He believes most cases can be "modified" and the time limit cut short by the use of intestinal antiseptics, and advises the sulphocarbolates—in doses of 5 to 15 grains every two hours, as need or 40 to 100 grs. in the twenty-four hours. If there is much diarrhœa, the zinc salt is preferred; if the stomach is acid, the sodium is to be used; in the later stages of the disease with wasting of tissues—lime salt is substituted. The disadvantages in their use are that they are not made in Germany, are cheap—and have no manufacturing chemist to push their claims, but must stand on their own merits.

Brainfag, from worry, overwork or excesses of various kinds, is quickly relieved by the use of celerina, in teaspoonful doses three times a day.

The Buffalo Academy of Medicine is making a determined effort to check the sale of toy pistols in that city. Let the good work go one.

ABSTRACTS.

The Feeding and Care of Children After the First Year.

(Roland G. Freeland—Archives Ped., June, 1904.

The child's first year has been written of and its management fairly settled, still we cannot assume, when it comes under our management in the second year, that it has been vaccinated, has been taught to urinate in a vessel, or to have its bowels moved at a regular time in a vessel, or if a male child, has had his foreskin forcibly retracted or circumcised.

Are not we, as physicians, too lax in efforts and in instructions in regard to the care of the child and especially so after the first year?

The following are essential for best results in the case of this class: Control (a) the feeding; (b) the rest; (c) the exercise; (d) the ventilation and exposure to fresh air There are three exponents of a well conditioned child—a healthy complexion, a clean tongue, and well digested movements. Children are generally fed too much after the first year. A complete dietary for each year up to the fourth, and specific instructions as to the *regime* of the child are given of which the following is a summary:

"Systematic examinations of all children under our charge should be undertaken at regular intervals, and should include the level of the shoulders and the hips, the spine, eyes, ears and throat.

During the second year a child should be fed five times a day; the diet at the beginning including only milk, gruel and orange juice; to which later may be added an egg, soup, bread and butter and at the end of the year meat. Beef juice should be used only as a tonic.

During the third year three meals should be given, with an extra bottle of milk at 10 a. m.; the articles of food being continued with the addition of certain vegetables and simple desserts.

After the third year but three meals a day should be given, including the same articles of food, throughout childhood about one quart of milk should be taken daily and the evening meal should consist only of cereal and milk and bread and butter. Both the amount and variety of food should be carefully restricted.

Children during the second year should sleep twelve hours at night and have a morning and afternoon nap each day, and throughout childhood should continue to sleep twelve hours at night with one nap during the day.

Provision for the exercise of children should be carefully planned. At first by use of nursery fence and baby jumper, and later by systematic walks for short distances at a time, and still later by bicycling, horseback riding and tramps in the country.

Throughout childhood they should be kept as much as possible out of close and crowded rooms. When in the house the room should receive ventilation from out of doors and they should be kept in the absolute open air several hours each day."

The Medical Aspects of Decapisulation of the Kidney for the Cure of Chronic Bright's Disease.—New York and Philadelphia Med. Journal. Elliott concludes as follows:

I. Chronic Bright's disease in its development constitutes a diseased condition of the entire system.

II. It is a disease of very gradual de-

velopment, and in the great majority of cases, has existed for months and years before the patient comes under observation.

III. It is produced by a chronic toxæmia, either systemic or infective in origin, which produces coincidently as a result, widespread arterial and cardiac degenerative changes, which, being once established, are permanent, and which in their development eventually constitute the most threatening element of the disease.

IV. General œdema or anasarca in chronic renal disease is in many instances in great measure a cardiac dropsy, brought about by advancing myocardial degeneration. It is occasionally so in chronic parenchymatous nephritis, and almost invariably so in chronic intestitial nephritis.

V. It may be stated that, in like manner, developing anuria and uræmia in chronic nephritis may be largely cardiac in production, the functional inadequacy of the kidneys having its inception in the fall of blood pressure incident to circulatory failure.

VI. In the later stages of chronic nephritis, of whatever character, the case is apt to take on these cardiac aspects, which virtually convert the therapeutic problem into a question of sustaining a failing heart.

VII. Albuminuric retinitis must be looked upon as one of the terminal symptoms of chronic nephritis. The concordance of opinion places a limit of two years upon the prognosis after development of this complication. The statistics gathered by Suker of cases operated on, show that, in place of prolonging this limit of expectancy, operation has a decidedly contrary effect.

VIII. It is to be borne in mind that chronic nephritis is a disease of slow and spasmodic development. It is well to realize its exacerbations and remissions, so as to avoid the error of mistaking remissions for cures.

IX. The mere fact that the general condition of the patient improves somewhat after decapsulation does not establish the validity of the operation, for hygiene and rest will do the same for the patient to a remarkable degree in many cases. As the factors of hygiene and rest are invariably associated with the surgical procedure, it is possible that the resulting benefit may, to some extent, accrue from those sources.

X. The results of experimentation demonstrates that, within a period of three months and a half after decapsulation, a new, and in most cases, a tougher fibrous envelope has taken the place of the original capsule. This fact may account for the many relapses and deaths after that period in cases operated on, and in chronic cases, at least, it narrows the prospect of improvement to a period of months.

Some Factors in the Etiology of Pneumonia.

(J. M. French, M.D.—Medicine, June 1904.)

Age.—In the mortality, the two extremes of life—infancy and old age—are the most fatal. No age is exempt. Middle life, or rather between 20 and 30 years, shows the smallest mortality, but the larger number of cases, because the vital powers are more capable of resisting the disease. From 30 years upward the ratio of the mortality increases.

Sex.—The number of cases is greater in males, but the ratio of deaths is larger in females.

Race.—The colored race shows less resistance to the disease, and a higher mortality, but no special prevalence of the disease. The question of race and

nationality deserves further investigation.

Residence.—The number is greater and the mortality ratio larger in the city than in country districts.

Occupation and habits of life.—Those who are exposed more to vicissitudes of the weather are most liable to the disease. Sudden changes from indoors to inclement weather is a prolific cause. People habitually out doors are not so liable to the disease, so soldiers in the field are more exempt than in barracks. Sailers though much exposed, are not pront to pneumonia. In the professions, the mortality is in proportion to the amount of exposure, and in the trades to the sources of irritation, e. g., filemakers show the largest per cent. of mortality. The two extremes in wealth, the very poor and destitute and the pampered rich are more favorable to the disease than the middle walks of life.

Climate and Seasons.—It occurs in cold and hot climates, but in this country is more prevalent in the South than in the North. Altitude prevailing winds, moisture, dryness, high or low temperatures exert any important influence. The seasons have a greater influence, the winter and spring months showing an increase in the disease.

Atmospheric Vicissitudes.—Exposure to the elements by persons insufficiently protected, and with an abounding vitality and power of resistance to disease leads to increase prevalence and mortality.

Alcoholism, Disease and Debility.—Debilitating causes of every kind lead to the disease. Of these, alcoholism is most potent and the least able to resist the attack. A previous atack predisposes to the disease.

Traumatism.—Injury to the lung enables the diplococcus to find a suitable nidus at the seat of injury.

Infection.—Pneumonia is universally recognized as an infectious disease. It requires the conjoined action of two or three elements—a weakened or debilitated condition of the system; the direct, or exciting cause, and the specific germ.

Theories for increased prevalence and fatality of the disease are advanced that the virulence of the infecting material is increasing; the lessened vitality of the system of the present day, in comparison with the past, and a third lays the blame on the present day treatment.

Factors Causing Tuberculosis or Aiding its Spread.

(C. L. Mix, Medicine, July, 1904.)

Sex.—Males in urban districts and females in rural districts are more affected. In the country males live out doors and females in the house. In cities the reverse is largely the condition of life.

Age.—The maximum mortality is between 20 and 30 years, the females mortality preponderating, since it is the earliest to nature.

Race.—Chinese, Indian and colored races, in the order given, suffer more than the white race, because of the crowded condition of their homes and the general unsanitary and unhygienic mode of living.

Occupation.—Outdoor work shows comparatively a small percentage of deaths; inside work, accompanied with dust, shows an increasing ratio in comparison with the degree of confinement and the character of occupation.

Climate.—May gives the largest mortality, indicating that winter with bad ventilation has proved too much for the consumptive.

Consumption is contagious; heredity is not the main factor; contact with an individual is the all important cause.

Then, too, consumption is a house disease, for contact with the surroundings of one who has died of consumption is as bad as living with the individual himself. * * * * Germs live in bright sunshine from 15 minutes to a few hours at most, but for two years in dark damp apartments. House disinfection after a death from consumption is a crying need. Tenement laws should make the construction of inside sleeping rooms a crime. It is our duty to see that our neighbor's house is properly ventilated, to insist that he spit in proper places; that he does not spend his evenings in tobacco-fitted saloons, and, it may be added his nights as well. He must have air and sleep and in sufficiency. The small park movement in cities is of huge importance. Our streets should be wide, to admit abundant sunshine, and houses low, not to exceed four stories, and detached. Solid blocks of houses are a hygienic crime. The smoke nuisance should be attacked upon a new and vastly more important basis. Houses should not be permitted to become graneries of germs. Blind alleys should be opened, and the use of windows should be taught the poor. Window curtains should be up and not down, and people, not furniture, should be protected. With curtains down the carpets do not fade, but the children do. dirty hands make dirty eating, and contamination of food is fatal to children especially. Malnutrition paves the way for disease, and many of the very poor eat too little. Those employing help must remember that living wages are the working man's right.

Treatment of Tuberculosis.

(R. P. Preble, M.D.—Medicine, July, 1904.

Patient should be informed of his condition and the danger of the sputum infecting others, and instructed in the proper disposal of it. No need of isolation to prevent spread of disease—simply destroy sputum.

No known remedy has any direct effect upon the bacilli. Efforts to discover such a remedy are not hopeless, and when found it will likely be a biological product, either of the human or bovine variety of the tubercle bacillus.

Supply the patient with plenty of fresh air—no need of even going out of the city. Build a board structure in the back yard, if no better place can be found. It should contain 1,000 cubic feet of air; floor raised enough to insure dryness; built of unmalched board, with rain proof roof. The first four feet from the floor should be enclosed; balance of sides should be so arranged with windows, hung on hinges at the top, so as to open outward from the top. This gives plenty of fresh air, protection from the sun and rain, and ability to avoid drafts. Furniture: Iron bedstead, table, one or two chairs and rug. Covering to suit the temperature. Sleeping bag if necessary; flannel night clothing, if sweating at night.

Food should be variable, and as much as patient can digest, which will be more than the appetite calls for; albuminoids and fats in larger proportion than for normal dietary, and served at frequent intervals.

Patients with fever should not exercise, but should when fever disappears. It should be mild, for short periods, in the open air, and suspended before exhaustion.

Hypodermic Medication.

(J. L. Wolfe, in Medical Sun, June, 1904.)

Hypodermic injections often carry dangers unlooked for. Put your pa-

tient in a comfortable position and do not overlook the influence of shock. Avoid septic poisoning by keeping syringe aseptic. If nothing else is convenient use boiling water. If syphilis treated by hypodermics, a syringe should be kept for each syphilitic patient, or at least a separate one for this class of patients. Withdraw needle a few times before injecting medicine, to avoid throwing it into a vein. The following rules should be observed:

1. Only the most reliable medicaments should be used.

2. Whatever drugs or combinations are decided upon should be newly prepared, either with distilled water, or water that has been boiled and filtered.

3. All medicines for hypodermic use, when not so prepared, should be preserved by the addition of suitable antiseptics.

4. Perfect solution of the drug must be secured to prevent the development of abscesses.

5. Tablet triturates containing the exact amount of the drug wanted are preferable to the extemporaneous preparations, and few more generally used, may be kept indefinitely.

The size of the dose should be much less, as a rule, than that administered by the stomach; certainly not more than one-half and one-third to one-fourth will often be found sufficient.

Inflamed tissues and bony protuberances should always be avoided."

Subcutaneous Injections of Oil for the Cure of Consumption.

(T. B. Keyes—Jour. Med. & Sur., June, 1904.)

Tuberculosis is a disease of malnutrition. To cure it there must be forced alimentation. The anorexia of consumption is the greatest drawback to successful treatment. It has been demonstrated that the white blood cells have the power of digesting oils, and upon this theory the author has treated nine cases of tuberculosis with marked benefit. Other adjuncts known to be beneficial, as out door life, forced feeding etc., were used, but the results were marked after commencing the use of the oil. Thoroughly sterilized high-grade olive oil is used, and with an asperating needle is injected under the shoulder blades each day, using a different one each day, except for very large quantities of oil when both are used. Twelve C.C. of oil is used the first day, gradually increased to the extent of tolerance of assimilation, often giving as high as 200 C.C. daily. The oil thus injected is absorbed and assimilated by the blood cells, which are greatly increased.

Physicians using this treatment are requested to communicate results to the author, Dr. Thos. Bassett Keyes, Chicago, Ill.

Possible Malignancy of Warts.

(W. W. Keen, Jour. Am. Med. Asso., July 9, 1904.)

Warts and moles are often conjenital ,sometimes coming on in early middle life and occasionally in old age. They are all subject to traumatism, and the irritation thus produced may eventuate in a malignant growth. The patient thinks but little of these growths until they begin to increase in size, when attempts at removal are made, which are crude, as tying a string or long hair around them or local applications, and rarely effectual. The advice given by text-books and surgeons to leave them alone unless an increase in size is noticed is all wrong. They should be re-

moved thoroughly before any growth is detected. The family physician should see that this advice is given and acted upon. Twenty-five cases operated on are reported.

Feeding in Early Infancy.

(*Medical Record.*)

The following formulaes are taken from a reprint which was sent to us by the writer, Dr. Jas. E. Winters:

Formulae for Home Modification of Bottled Milk.—In early infancy, and always in summer, one-fourth the quantity of food should be lime water. The percentage of proteid is higher in the autumn, hence the formulae formerly published have been recast to conform to this.

Formulae No. 1, 1st, 2nd and 3rd days:

Upper ½ oz. from each of 2 quart bottles of milk.

Milk sugar 5-6 oz. (about 3½ teaspoonfuls).

Lime water, 1½ ozs.

Filtered water, 9 ozs.

Quantity at each feeding: first and second days, ½ oz.; 3rd day, 1 oz.

Ten feedings, at 6, 8, 10, and 12 a. m., 2, 4, 6, 8 and 12 p. m., 4 a. m.

Formulae No. 2, 4th, 5th, 6th and 7th days:

Upper ½ oz. from each of three quarts bottles of milk.

Milk sugar, 1 oz. (about 4 teaspoonfuls).

Lime water, 2 ozs.

Filtered water, 10½ ounces.

Formula No. 3, second week:

Upper 2¼ ounces from 1 quart bottle of milk.

Milk sugar, 1 oz. (about 4 teaspoonfuls.

Lime water, 2 ozs.

Filtered water, 10 ozs.

For chemical accuracy, the upper 7 ounces should be used in making Formulae No. 4. Clinically, the upper 6 ounces proves better.

Formulae No. 4, third week:

Upper 6 ounces from 1 quart bottle of milk.

Milk sugar, 1.8 ounces (about 7 teaspoonfuls).

Lime water, 4 ounces.

Filtered water, 18 ounces.

Formulae No. 5, 4th to 8th week.

Upper 9 ounces from 1 quart bottle of milk.

Milk sugar, 2 ounces (about 8 teaspoonfuls).

Lime water, 4 ounces.

Filtered water, 19 ounces (or enough to make one quart).

Formulae No. 6, 9th to 12th week:

Upper 11 ounces from one quart bottle of milk.

Milk sugar, 1.9 ounces (about 7½ teaspoonfuls).

Lime water, 4 ounces.

Filtered water, 17 ounces (or enough to make one quart).

Formulae No. 7, fourth month:

Upper 13 ounces from one quart bottle of milk.

Milk sugar, 1.8 ounces (about 7 teaspoonfuls).

Lime water, 4 ounces.

Filtered water, 15 ounces (or enough to make one quart).

Formulae No. 8, 5th and 6th months:

Upper 15 ounces from one quart bottle of milk.

Milk sugar, 1.7 ounces (about 6 2-3 teaspoonfuls).

Lime water, 4 ounces.

Filtered water, 17 ounces (or enough to make one quart).

Formulae No. 9, 7th, 8th and 9th months:

Upper 17 ounces from one quart bottle of milk.

Milk sugar, 1.4 ounces (about $5\frac{1}{2}$ teaspoonfuls).

Lime water, 4 ounces.

Filtered water, 11 ounces (or enough to make one quart).

Formulae No. 10, 10th and 11th months:

Upper 21 ounces from one quart bottle of milk.

Milk sugar, 1.1 ounces (about 4 1-3 teaspoonfuls).

Filtered water, 7 ounces (or enough to make one quart).

Formulae No. 11, 12th month:

Upper 25 ounces from one quart bottle of milk.

Milk sugar, 0.7 ounce (about $2\frac{3}{4}$ teaspoonfuls).

Lime water, 4 ounces.

Filtered water, 4 ounces (or enough to make one quart).

When and How Should we Operate for Prostratic.

(*Hypertrophy Medical Record.*)

Willy Meyer reaches the following conclusions:

1. In view of the present advanced status of prostatic surgery, the catheter should no longer be advised as a *routine measure* in the surgical treatment of the disease under consideration.

2. Operative intervention should be urged as soon as the time for the regular use of the catheter has come.

3. Prostatectomy, being the most radical as well as the most surgical procedure, commands the first place in the treatment of the hypertrophied prostrate gland, especially since the technique has been perfected to such a point as to render the operation a comparatively safe one, the mortality having been shown to be less than 5 per cent.

4. The perineal route seems preferable to the suprapubic, for the reason that it enables the surgeon to do the operation more under the guidance of his eyes.

5. The choice of route in the average case will probably hinge on the question of preservation of sexual power, provided this point is of importance to the patient.

6. The patient's age, as such, does not furnish a contraindication to operation; it is his general condition merely, that has to be taken into consideration.

7. Where the effects of general anæsthesia are feared, spinal anæsthesia is indicated.

8. If the operation with the knife be refused or contraindicated, Bottini's operation should be advised, since it, too, yields excellent results.

9. Thus, we have two useful methods of operation for prostatic hypertrophy, viz., prostatectomy by the perineal or suprapubic route, and Bottini's operation, each holding its own place, and one complementing the other.

Uric Acid and its Relation to the Clinical Manifestations of Gout and Lithaemic.

(*Medical Record.*)

Le Fevre states that some writers give uric acid as a cause of disease such an exalted position that if one reads their list of uric acid diseases one has an epitonic of all the ills flesh is heir to. Until recent years uric acid was believed to be a result of metabolism of all the proteids and an intermediate product in the end production of uric.

Lately, with the advance in physiological chemistry, the subject has been studied anew and a much clearer insight gained, although many points are still obscure. The present generally accepted theory is that uric acid is derived from substances in the nuclei of

the cells—the nucleoproteids—which by successive cleavage (decomposition) break up into albumin and nuclein, nucleinic acid and the xanthin bases, also called purin or alloxuric bases. The possible end oxidation product or one of the end products of these bases is uric acid. The relation of uric acid output to the occurrence of leucocytosis has raised the question whether the factors that increase the activity of the lymphatic tissue (organs) might lead to the accumulation of nuclein, which sometimes results in the increased production of leucocytes, and at other times only in an increased production of alloxuric bodies through their cleavage or oxidation. The nucleoproteids may come from the breaking down of cells in the body—called endogenous, or from the diet, called exodogenous.

There are a number of theories as to the cause of the symptoms that attend an attack of gout. (1) The mechanical theory; (2) the lessened alkalinity of the blood and subsequent precipitation of the uric acid; (3) more lately the theory of toxæmia has been advanced. They claim that uric acid is not found as such in circulating blood and lymph, and that in the form of biurate of sodium it is found only in certain structures of the body where precipitation has occurred.

Just what this toxæmia is we cannot at the present say, for it is impossible to follow all the steps of constructive and destructive metabolism, but certainly we have no right to decide that it is due to uric acid circulating in the blood.

What we do know from clinical experience is that it is dependent on a want of balance between the amount of food and the powers of metabolism to elaborate and oxidize it in a normal manner.

Lithæmia should be considered an expression of more or less profound disturbance of the metabolism, and our aim should be to find out at what point the disturbance occurs and what has induced it. Uric acid over-production, its retention in the body, its precipitation in the tissue, and the secondary pathological changes induced by it, are merely incidents in the course of this disorder of metabolism and nutrition.

The Coming Method of Treatment of Salpingitis.

(*Brooklyn Medical Journal.*)

McNamra quotes the following conclusions of Treub:

"1. Medical treatment suffices in at least one-half of the cases of salpingo-oophritis. 2. Medical treatment being insufficient or contraindicated, one should never at the outset perform a radical operation of any sort. 3. The first operative stage should always be posterior colpotomy."

To perform the colpotomy he gives the following method:

The vagina may be opened anteriorly or posteriorly, the latter most usually. The cul-de-sac once opened, the identification by the sense of touch of the diseased appendages, the liberation of adhesions that may separate pockets of pus, and the use of the finger, scissors or bistoury on guarded finger to incise pus sacs. The tubal wall perforated, one tears the partition with the fingers. An antiseptic lavage and application of a tampon of iodoform gauze completes the operation, which is extremely simple.

The Antiseptic Treatment of Typhoid Fever.

(*Therapeutic Gazette.*)

Kesteven states that he desires to call the attention of the medical profession

to his specific antiseptic treatment of typhoid fever, viz: oil of eucalyptus. In his first article (1885) he reported 22 cases which were treated with oil of eucalyptus with only four deaths. Since then he reports that he has not lost a single case.

He states that while oil of eucalyptus cannot lay undoubted claim to destroying the germs in the circulation that it does diminish the putrifactive and fermentative changes in the intestinal tract. That it gives greater relief to all the general symptoms of typhoid fever—such as tympanites, tormina, leathery-brown tongue, bloody sordes, dry skin, etc. That the average duration of his cases is 14 days from the commencement of the attack to the re-establishment of normal temperature. He gives from ten to thirty drops in capsules of the oil of eucalyptus (P. D. & Co.).

On the Present Status of the Operation of Gastro-Enterostomy.

Rogers states that the mortality of gastro-enterostomy has steadily declined from 60 to 70 per cent., until now it stands between 15 and 30 per cent. That there are two causes, which seem to be visable in nearly all the bad results, which are to a considerable extent capable of elimination, viz.: The possibility of occlusion of the alimentary tract and the fact that only those who are beyond hope of recovery are, as a rule, deemed ready for so serious an operation. The causes of death as described in their usual order of frequency are shock, collapse, asthenia or inanition; infection and peritonitis; pneumonia; obstruction and the "vicious circle" of vomiting. The various "loop" operations have been devised to overcome the "vicious" vomiting. As a rule they are quite complicated and consume a long time. They are apt to become strangulated by volvulus of the loop or by hernia and strangulation over it of the gut lower down.

He reports a number of cases which were operated on by the Czerny-Petersen method. This method does not involve any loop operation with attendant dangers, is quickly performed and there is no change for volvulus or hernia above it. The posteria surface of the stomach is exposed and joined to the first three inches of the jejenum, which lies directly beneath, separated by the non-vascular portion of the mesocolon, and runs vertically down the spine. He uses a Murphy button reinforced by a row of Lembert sutures to join the two cut surfaces.

A Consideration of the Surgical Treatment of Chronic Bright's Disease from the Ophthalmic Standpoint.

(*New York and Philadelphia Medical Journal.*)

Suker concludes as follows:

First: As, at the very least, 25 per cent. of cases of all grades and variety of chronic Bright's disease present evidence of retinal or other serious fundus complications, and

Second: As these various fundus complications are usually of the degenerative inflammatory type, attended by like changes in the kidneys, and

Third: As the cardiovascular system is, or shortly will be, seriously involved, and

Fourth: As such changes may develop without any subjective symptoms on the patient's part, and

Fifth: As these retinal complications have been accepted as indicative proof of a general circulating systemic toxine, and designating the acme of the development of the Bright's disease, and



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Sixth: As the death rate of this class of cases under the best medical treatment (both hospital and private practice) is about 75 per cent. for the first year, and at least 85 per cent. for the second, scarcely any subjects surviving three or four years; while, in cases operated on it is 100 per cent. for the first years, and

Seventh: As these fundus findings are of paramount prognostic import in an inverse proportion to the age of the patient, and

Eighth: As the medical aspect of this question, as presented by Dr. Elliott, offers as good, if not far better, results than the decapulation in like cases—therefore must this climatic array of positive clinical data, which is so palpably evident as well as available, not be disregarded on the part of the surgeon in endeavoring to establish the validity of this operation under discussion. This is at least true for the complicated cases; especially so, when it can be said that the patients in some cases verily died because of the operation and others in spite of it ,while all complicated ones operated on fell within the pale of the classic two year limit.

Dr. John H. Gibbon, surgeon at the Pennsylvania Hospital, has been elected associate professor of surgery at Jefferson Medical College.

The next meeting of the International Congress for the study of tuberculosis will be held in Paris in 1905, from October 2 to 7.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

OL. L. CHARLOTTE, N. C., AUGUST, 1904. No. 8

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

Advice to Young Doctors.

There are certain articles connected ith the work of a physician essential the practice without which he should t try to examine and prescribe for a tient. These may not all be needed an examination, and indeed may none used in a given case, but still should convenient. The first to be men- ned is a good watch. This should a reliable time-piece, for the regula- n of all your appointments and en- gements is dependent upon an accu- e account of the time. The second nd should be of such a shape and face and numbering of such a char- er as to be easily read. A stop-ar- ngement such as is used by judges in rse racing would not be amiss, but is t necessary. A fountain pen and a od lead pencil are both necessary. e clinical thermometer is too im- rtant an aid to diagnosis to be neg- ted. Nearly all those on the market w are self-registering, and with mag- ying lines. In your selection of this trument procure a tested one of a re- ble manufacture, and one easily read. A plain rubber case is the most convenient form in which to carry it, though many prefer the metal case with chain attached as being safe from accidents. The hypodermic syringe is an instrument the use of which you should learn, but should also learn *very* early in your career that it is an overworked instrument and its use attended by dangers other than that of injecting air into a vein. Study to treat your patients without its use as much as possible, but keep a good one and have it with you for those cases in which it is a necessity. The essentials of a good syringe are well fitted parts that will not leak, one easily kept in order, and easily cleaned, ease and safe adjustment for needles, and well pointed needles of good calibre. In the same case with the syringe should be an assortment of tablets for hypodermatic medication. The selection of kinds to be carried will be a matter of individual needs. The more commonly used are morphine plain, morphine and atropia, atropia, nitrate of strichnia, sulphate of strichnia, cocane hydrochlorate, digitaline and

terpeth mineral. To carry all these in the case makes it rather large for the pocket, though the manufacturers now put them up very compactly.

The syringe should always be kept clean and in perfect order, ready for instant use. As before intimated, it should be used only when absolutely necessary, and when nothing else will do, and under these circumstances there is no time for cleaning and repairing the instrument. Look well after the needles especially. Extra needles cost but a trifle, and it is better to have a supply on hand than to be without one when needed.

In the winter time and during the prevalence of lung troubles in the early spring months it is well to carry a stethescope in your daily rounds.

These are essential to have with you when in active practice. Other conveniences may be added according to the class of practice and the number of your pockets. The pocket diary on which you keep your accounts will be discussed in another paper. A small pocket case with a few instruments is often a convenience, though surgical cases usually can be deferred long enough at least to get your emergency bag. An objection to surgery of the class calling for immediate work—is that it is not done with proper antiseptic care. At least this has been our observation. There are some advantages in having a case convenient in being able to do minor surgery, as dressing a cut, opening an abscess, etc.

Many physicians carry habitually a small case containing a dozen or so draham vials filled with remedies useful in emergencies. Where drug stores are not convenient and for night visits the plan is a good one.

A tongue depressor is often a convenient article to have with you, but if you can carry one, be sure to have it in a leather or chamoise case, not loose in the pocket.

Many other devices for examining and treatment of patients have from time to time been recommended by inventors and manufacturers, as essential to the paraphernalia of the doctor in his daily rounds, but if one should atempt to carry them all with him, it would be necessary to add to his wearing apparel in order to supply pockets sufficient for their reception.

While it is not necessary to carry the obstetrical bag with you, it should always be kept in order, and easily accessible. Most of the obstetrical bags on the market are too small, especially are they too short for long forceps. An ordinary normal labor may be successfully conducted with the aid of carbolized oil and a few bi-chloride of mercury tablets, but it is not well to attend a case so poorly equipped, for but few are normal, and even these few can be aided without being guilty of meddlesome midenifery. Prof. Lusk says in his text-book on obstetrics: "When summoned to a patient the physician should go armed to meet the sudden emergencies of obstetrical practice. His armentarium should include a silver catheter, an English catheter of small size (No. 7) for use in asphyxia of the new born ,child, a pair of forceps needles and needle holder, and silk or wire for sutures, a Davidson syringe a set of Barnes dilators, and a hypodermic syringe. He should go provided with chloroform, Magendies' solution of morphia-ergot, the perchloride or the persulphate of iron, carbolic acid, powders or tablets of bi-chloride of mercury, and a small vial of sulphyric ether." To this may be added tape for the cord, scissors for cutting

ne cord, aromatic spirits ammonia, hiskey, if in doubt as to securing it the house, bromide potash, hydrate hloral, and one or two modern band-ges. Many obstetricians carry also eir own obstetrical pad, but a rubber heet, or even a piece of good oil cloth nswers the purpose very well.

The same care should be bestowed pon keeping the emergency bag in or-er as is advised regarding the obste-ical bag. In addition to keeping them ocked and in order, it is well to have special place for them so that you can nd for them if needed, and if they re always kept in one place, there will no trouble in looking for them.

The emergency bag is not intended to rry instruments for any thing more an sufficient to meet the indications accidents, and tide over the first few ours after. These are generally to con-ol hemorrhage, relieve shock, and ake the patient as nearly comfortable possible. For these purposes the g should contain a tourniquet, a sup-y of homostatic forceps, dressing for-ps, bandages, cotton, iodoform gauze, -chloride of mercury tablets, one or o scalpels, scissors, adhesive plaster, podermic syringe, tablets of mor-hine and nitrate of strichnia, spirits mmonia and chloroform.

It was our intention to discuss in is issue of the JOURNAL the subject of spensing by the physician, but the atters touched on have seemed of ough importance to be alluded to re, and the question of dispensing ill be taken up next month.

he Prophylaxis of Venerial Diseases.

The increase in venerial diseases and e ravages to its victims has given ad-nced thinkers in the profession and ong philanthropists and students of economic social conditions much concern for the past few years, and an extended study of the far-reaching effects in the pain and suffering they bring their influence upon society, their deteriorating effects upon the system, the lowering of the morals of our citizenship, and the resultant evils to the home life, has but accentuated the necessity for in some way curtailing its spread. The American Medical Association two years ago appointed a committee on this question and this committee made its second annual report to the House of Delegates at the recent meeting in Atlantic City. The committee has done much work in collecting, sifting and tabulating information on the question. The scope of its inquiries is a broad one, and the evils that follow in the wake of the different forms of venerial troubles are given in no uncertain works. These evils are seen and recognized by a certain proportion of the profession, but we fear they are not appreciated to the full extent of their magnitude by the profession as a whole. When 25 per cent. of the troubles of the female generative organs can be attributed to gonorrhæal infection, and 66 2-3 per cent. of the sterility existing to the same cause, the conditions cries aloud for relief. If these were the only evils encountered, it would still be bad enough. To them must be added a long list of the suffering of both sexes, and especially that of the woman, with its years of invalidism and often only relieved of her miseries in death; the moral obliquity; the unhappiness engendered by the knowledge of marital infelicity, and many others that could be mentioned. The most unpleasant and deplorable feature of the question to contemplate is the fact that the innocent wife has to suffer untold agonies on account of gratification of the lusts of

the husband, whom she has every right to hold as pure and undefiled as he wishes her to be.

That a remedy should be found for this is evident; and it is also certain that the iniative should come from the medical profession. The committee of the American Medical Association recommends the forming of societies, county, State and national, for the combating of venerial diseases. Whether this will fully meet the requirements of the situation is not certain, but there is a necessity for concentrated action on well defined lines.

The history of the efforts for suppressing the vice of unchastity by licensing houses of prostitution in continental Europe, shows a lamentable failure to control by State aid and police regulations, while some statutory regulations might prove advantageous, none will prove of any avail without the sanction of public opinion behind them. At present the public is not informed on the subject of sexual hygiene. It knows practically nothing of the germs of the different venerial troubles, their manner of introduction, course ravages on the system, vitality, etc., and the dangers existing in promiscuous gratifications of the animal passion. The question has always been considered too delicate for general discussion, and if allusions are made to it in print, it is with an apologetic way for the necessity of speaking of it at all.

If good is to be accomplished in a crusade against the vice the time has come for more boldness in discussing it. The public needs but to know of the evils and the means of combating them, for a gradual improvement to follow, and it is a duty the profession owes to society and good morals, as well as to the application of preventative measures against disease, that this information be given.

In morals, and in the sight of God, adultery is as much a crime in man as in woman. The idea prevalent in society that man is less culpable for lapses in this particular is all wrong, and it needs to be combatted with all available means until a moral sentiment is created that will make him the same social outcast for his laxity as is placed upon woman. Man must know that morals, socially and the health of himself and his future wife demand of him purity of life. Marital infidelity is as criminal in the man as in the woman, and this should be recognized by the law and by society. Until the profession can and will teach these and similar truths there is but little hope of staying the progress of venerial diseases.

Not only must the morals of the offence be taught, but its dangers to the health and physical condition of the present and future generations be shown. Physicians should be teachers of morality, but it is more in the conservation of health that the public looks to the profession for counsel and guidance and in this particular it is essential that we speak in no uncertain terms.

These matters can be discussed in societies and the conclusions reached, with the necessary advice, given to the public by a body of individuals as an organization or society, with better effect than the same member working separately. There is more force in such a device, and the question can and will be discussed more fully and freely with a number as sponsors for the statements made, than by one man working independently. For this reason we endorse the suggestion of the Association's committee to form societies in connection with our medical organizations to which shall be invited any interested in the question, and willing to labor for it.

for combating venerial diseases.

Much can be done individually by the doctor in his advice to his patients, but the trouble is that the chance is not often secured for giving the advice until the disease is present. At present but little help can be secured from the public press, but when the necessity is shown for action we believe the press will not fail. If as physicians we believe venerial diseases are increasing and the evils are as great as are depicted, we should lose no time in taking steps for their suppression.

Suicides.

In the December number, 1903, of the JOURNAL in an editorial we alluded to newspaper accounts of such occurrences as exciting cause for other cases, and held that less publicity should be given them by the lay press. Dr. Jno. L. Davis, Medical Director of the Union Life Insurance Co., claims (*Jour. A. Med. Asso.*, July 9th, 1904) that there are fully 10,000 suicides a year in the United States and among other causes for this condition says:

One more factor remains to be considered—the lay press. How artistically are the descriptions given with pencil and camera! How eagerly we read the thrilling and revolting details of the case! Column after column we gloat over the horrid details; some readers, a little warped in their nervous systems, whose impulses are like skittish horses and ready to run, are so fascinated with the story that sooner or later they imitate exactly what they have read so hungrily. Many and many a one has such a description directly led to other suicides.

A few months ago a peculiarly horrible murder was committed in a country town near Cincinnati.

The whole neighborhood was acquainted and many of the people related through kinship to the victim and members of her family, and very widespread interest in the affair was natural.

As the time for trial approached, our enterprising papers deputed their best reporters and artists for the work. One paper, a little more active than the rest, even established a private telegraph wire to the scene of the trial.

The papers were filled with the full details, descriptions, photographs of surroundings, the suspects, victim and others connected with the proceedings. The whole country about the little village was saturated with the fullest information regarding the case.

Ten days ago the trial was ended, but the terrible results of the newspaper enterprise are not yet ended. Thus far there have been two attempts at suicide among those who have carefully followed the proceedings, and a third man has been driven insane.

All of these crimes, I think, should be charged to the excessive unwarranted notoriety given to this case through the press.

The Treatment of Summer Diarrhea.

In the treatment of any form of diarrhea an accurate diagnosis must first be made. For convenience it is customary to classify diarrheas somewhat after this fashion: 1. Diarrhea of relaxation, or serious diarrhea, due to disordered innervation; 2., crapulous or lienteric diarrhea, due to imperfect digestion; 3, catarrhal diarrhea, acute or chronic; and 4, ulcerative diarrhea, due to intestinal ulceration.

This classification is by no means perfect as is shown by the multiplicity of terms applied to the various pathologic states characterized by diarrhea. Thus we have the terms acute inflammatory diarrhea, acute summer diar-

rhea, choleraic diarrhea, dysenteric diarrhea, nervous diarrhea, tuberculous diarrhea, etc. In each case the diagnosis is determined by the actual condition prevailing, of which the intestinal laxity is usually but a prominent symptom.

The question of treatment is one of the utmost importance. Without entering into a discussion of what soon proves to be a very broad subject, it may be worth our while to consider briefly the status of the antiseptic method of treating intestinal disorders, especially those caused by pathologic organisms and of which diarrhea is the chief symptom. Apart from well-directed efforts to clear the intestine of bacteria, reduce the temperature, sustain the vitality of the patient, regulate the diet, secure proper hygienic conditions, rest and good care, the selection of the proper antiseptic agent demands the exercise of the physician's best judgment.

Whether or not it be possible to attain intestinal asepsis is of course a debatable question, but it is a well-established clinical fact that intestinal antiseptics do good and modify the course of enteric diseases of bacterial origin, notably typhoid fever, dysentery and summer diarrhea. However, there is a difference in the degree of efficiency of the various antiseptics, the utility of many being limited by the risk of untoward action from excessive dosage. In those cases of ileo-colitis caused by the bacillus of Shiga many of the serious symptoms are due to a mixed infection, to combat which prompt and vigorous measures are required.

The experiments of Novy and Freed (contributions to *Medical Research,* p. 114 with) benzoyl-acetyl-peroxide (Acetozone) showed that this substance is extremely germicidal to the organisms found in the alimentary canal. Its administration to rabbits resulted in the "practical streilization of the contents of the stomach." In several experiments with these animals " the intestinal tract, apart from the cecal pouch, was found to be sterile." Neither buillon tubes nor agar showed growths, though the controls gave abundant cultures. Other experiments showed that enzymes and toxins are also destroyed or rendered inert by Acetozone. Further study demonstrated not only the remarkable germicidal power of Acetozone, but also the fact that its aqueous solution may be given internally, and even injected intravenously, without harm. From these data we infer that this substance ranks among the most powerful germicidal agents, while it exerts no harmful effect upon the human organism, and may, therefore, be employed as a therapeutic agent in the treatment of summer diarrhœa and other infectious enteric diseases with the best effect. There seems to be abundant evidence to warrant the suggestion that Acetozone should prove most valuable in colonic flushing, as it is entirely free from the danger that attends the use of large quantities of even weak solution of mecuric chloride, and for that reason may be used fearlessly.

Pinus Canadesis.—When an internal mucous astringent is indicated in such cases as chlorea infantum, etc., Kennedy's dask Pinus Canadensis should be given in an alkaline medium.

Southern Pines, N. C., is on a continued boom. They are about to build another large hotel on the property to the left of the town going south. This is one of the most desirable points in the south for general all-round winter residence.

AMERICAN MEDICAL EDITORS ASSOCIATION.

The thirty-fifth annual meeting of the American Medical Editors' Association, held at Atlantic City in June 1904, was one of the most successful in its history, C. E. de M. Sajous, president, presiding.

The many papers presented, as well as the numerous applications received for membership, is possibly the best indication of the interest displayed in the Society. Among the new members who joined at this meeting were the following:

Dr. Herman Knapp, editor of the *Archives of Ophthalmology,* New York.

Dr. J. Madison Taylor, *Sojous Encyclopedia,* Philadelphia, Pa.

Dr. Joseph McFarland, "Medicine," Philadelphia, Pa.

Dr. H. Longstreet Taylor, *St. Paul Medical Journal,* St. Paul, Minn.

William Davis, *St. Paul Medical Journal,* St. Paul, Minn.

Surgeon General Walter Wymann, *Sajous Encyclopedia,* Washington, D. C.

Louis L. Pilcher, *Annals of Surgery,* Brooklyn, N. Y.

H. Enos Tuley, *Louisville Journal of Medicine,* Louisville, Ky.

Andrew Mac Phail, *Montreal Medical Journal,* Montreal, Can.

A. W. Wright, *Canadian Practitioner, and Review,* Toronto, Can.

George Elliott, *Dominion Medical Monthly.* Toronto, Ont., Can.

E. E. Dorr, *Iowa Medical Journal,* Des Moines, Iowa.

Frank B. Cross, *Lancet Clinic,* Cincinnati, Ohio.

F. E. Daniel, *Texas Medical Journal,* Austin, Texas.

William F. Waugh, *Alkaloidal Clinic,* Chicago, Ill.

Wm. J. Robinson, *Critic and Guide,* New York.

Raymond Wallace, *Southern Medicine and Surgery,* Chattanooga, Tenn.

C. Sumner Witherstein, *Sajous Encyclopedia,* Philadelphia, Pa.

F. W. Samuel, *American Practitioner, and News,* Louisville, Ky.

Arthur J. Patlk, *Wisconsin Medical Journal,* Milwaukee Wis.

Langdon B. Edwards, *Virginia Medical Semi-Monthly,* Richmond, Va.

Clarence A. Smith, *Northwestern Medicine,* Seattle, Wash.

Horatio C. Wood, Jr., *Therapeutic Review,* Philadelphia, Pa.

Albert E. Stern, *Medical and Surgical Monitor,* Indianapolis, Ind.

James U. Barnhill, *Columbus Medical Journal,* Columbus, O.

Samuel F. Brothers, *Medico Pharmaceutical Journal,* New York.

Alfred B. Meacham, *Post Graduate,* New York.

G. L. Harrington, *Brooklyn Medical Journal,* Brooklyn, N. Y.

Among the interesting papers read, and thoroughly discussed, we would mention:

"Proprietary and Patent Medicines," Harold N. Moyer, Chicago, Ill.

"Military Medical Journalism of the Present Day," Major J. Evelyn Pilcher, Carlisle, Pa.

"Sundown Journalism," T. D. Crothers, Hartford, Conn.

"Medical Illustrations," H. V. Wurdemann, Milwaukee, Wis.

"Medical Journalism of the Pacific Coast," Winslow Anderson, San Francisco, Cal.

"The Medical Press vs. the Modern Plague," William Porter, St. Louis, Mo.

"Reading Notices," W. C. Abbott, Chicago, Ill.

"Immitation Journalism," H. Waldo Coe.

Following an animated discussion of Dr. Porter's article relative to the use of patent nostrums, the following resolution, endorsing the action of Mr. Bok, editor of the *Ladies Home Journal*, was favorably acted upon.

Whereas, the public is, and long has been, suffering from the use of nostrums, and from the misuses of medicine, and,

Whereas, The medical profession and press have endeavored by every means in their power to instruct the laity upon the subject, and

Whereas, Some journalists either do not understand the true situation, or find it to their pecuniary gain to favor the use of nostrums, and pander to the greed of their manufacturers at the expense of the health or even the lives of their dupes among the people, and,

Whereas, The eminent editor of the *Ladies' Home Journal*, Mr. Edward Bok, in an able and vigorous editorial on page eighteen of the May number of that journal, laid the truth of the matter before his readers, thus aiding in the work of warning and educating and conserving the health and welfare of the public, be it

Resolved, That the American Medical Editors' Association approves and commends Mr. Bok for the intelligent, honest, fearless and well-grounded position he has taken, which has been thoroughly appreciated by us and by the medical profession generally.

Resolved, That a copy of these resolutions be spread upon the Minutes of this meeting, be transmitted to Mr. Bok, and be published in the Medical Journals throughout the country.

Dr. Porter presented the following resolution bearing upon the death of Dr. I. N. Love, an ex-president of the American Medical Editors' Association.

Through the joys of to-day come refrains in minor key. We welcome our friends again, but some have dropped out forever. One day eager in all that makes the activities of life—the next cold and silent on the bosom of the dark, mysterious river. Dr. I. N. Love was no ordinary man. Endowed as few are, he cultivated the art of showing to others the natural bouyance of his nature and keeping well within himself the burden and shadows that few knew of and the many never dreamed of. No one was better known in the medical societies of the country and especially in this Association. Quick, witty, generous, he made friends at every turn and if to-day he made an enemy, to-morrow he was likely to kill him with kindness.

Of his work as a physician and editor, you who were his friends through the decades need not be told. As a physician he was sympathetic and intelligent beyond the possibilities of most men. The devotion of his patients was a natural sequence following the sunshine of his presence in the sick room. As an editor he was original and personal, but his personalities were more likely to be eulogistic than censorious. He called his journal "a reflex of the medical profession," but it was more notably a reflex of his own life.

Realizing the difficulty of expressing a just appreciation of the life of one so brilliant, so fascinating and energetic, yet in token of the sense of loss sustained by the Association, be it

Resolved, That the members of the American Medical Editors' Association, while mourning the decease of Dr. I. N. Love in the zenith of his manhood and opportunities for usefulness, remember and cherish the recollection of all in

his most attractive individuality that made his record so large a part of the history of this Association.

Resolved, That a large page of our record books be set apart for the resolutions, and that a copy be sent, with our truest sympathy, to the members of his family.

Wm. Porter.
C. F. Taylor.

A committee was appointed by the Chair, composed of C. F. Taylor, chairman, Dr. Hogehead, of San Francisco, Cal., and Dr. Pilcher, of Carlisle, Pa., and the secretary, member *ex-officio,* to draft a new Constitution and By-Laws to be presented at the next meeting.

The following officers for the coming year were elected:

President, Harold N. Moyer, Chicago, Ill.

First Vice-President, C. Evelyn Pilcher, Carlisles, Pa.

Second Vice-President, O. F. Ball, St. Louis, Mo.

Secretary and Treasurer, J. McDonald, Jr., New York.

The Executive Committee: C. E. de M. Sajous, Chairman; John Punton, W. A. Young, W. C. Abbott, H. M. Simmons, C. F. Taylor and Chas. Wood Fassett.

This Association now enjoys a membership of over 100 active medical editors, and those medical journalists not now associated are invited to present their applications for membership to the Secretary, Dr. J. MacDonald, Jr., 100 William street, New York City, N. Y.

Selections From Our Exchanges.

Appendicitis in the China Fleet.—F. H. A. Clayton states that, from information obtained from other medical officers as well as from his own observation, it would appear that quite an unusual number of appendicitis cases come under treatment on the China station. The usual developmental and anatomical peculiarities predisposing to attacks are no doubt present in these cases as they are in others, but the writer adds that in seeking to discover special factors, one is struck by the fact that the China station is that chiefly productive of digestive and intestinal disturbances, and probably also that more men of this station are affected by intestinal parasites than any other. The frequency with which Europeans resident in tropical countries act as hosts of ascaris and trichocephalus is a matter of common knowledge, but as far as the navy is concerned, this station seems to be esespecially responsible, as is borne out by the most recent health returns. The association of these parasites with dyspeptic disturbances and with catarrhal processes in the intestines, is, in the writer's experience, quite common among men on this station, and it is interesting to note that with appendicitis here diarrhœa rather than constipation is the rule. Several observers have suggested putrefying frozen food as a factor of appendicitis by the production of intestinal catarrh. There has been, for the last two years, a sort of epidemic prevalent in the height of the summer.

At this time far more vegetable food and especially fruit, is eaten by the men, and animal foods run more risk of decomposition. Consequently, digestive troubles are far more frequent. The presence of the common intestinal parasite quite possibly plays a part in producing a catarrhal condition, thus lowering *the natural* resistance and increasing the virulence of bacillus coli and the

other organisms in the canal, so predisposing to inflammatory processes. The wandering habits of ascarides must be kept in mind, with the consequent mechanical effects. The parasites may also convey other organisms. Finally, the small erosions produced by the parasites might readily act as the portal of entry of organisms. The writer notes some interesting cases.—*Journal of Tropical Medicine.*

The Simultaneous Occurrence of Typhoid and Malarial Fevers in the Same Patient.

By V. E. Watkins, M. D., Medical Department, U. S. Army Fort Miley, Cal.

In an article on typhoid and malarial fevers at Chicamauga, appearing in the *Journal of the Association of Military Surgeons* for February, 1904, the writer remarks: "It is much to be desired that a positive statement might be made as to the co-existence of typhoid and malarial fevers in the same patient."

The occurrence of these two diseases simultaneously in the same patient is so rare as to be almost a medical curiosity; but that such a combination does occur is an indisputable fact.

Two well-established cases came under my obseravtion in the fall of 1898. Both patients were soldiers who had served in Cuba, where the malarial infection was probably contracted.

The first case was admitted to hospital, Fort McPherson, Ga., on August 30, 1898. The temperature was high and there were chills at irregular intervals during the month of September. The typhoid fever symptoms in this patient were not marked, but the diagnosis of a mixed infection was confirmed by the demonstration of the estivo-autumnal organism in the blood, and by the obtaining of a positive Widal-reaction.

The second case was that of a private of the Hospital Corps, who had been an attendant on typhoid fever patients for some two months prior to his admission to hospital. About three months had elapsed since his return from Cuba, where he had had an attack of malarial fever. He was admitted as a patient to hospital in December 1, with a well-marked case of typhoid fever. Widal reaction was positive. During the third week chills occurred on alternating days with irregularity in the temperature. A microscopical examination of the blood at this time showed the presence of the tertian organism.

The clinical picture of the double infection is not characteristic, but will depend upon which process is the more active. A correct diagnosis from the symptoms alone is well-nigh impossible, and recourse must be had to the microscope.

The Local Use of Quinine in Hay-Fever.—A. D. Fulton a*Medical Record,* June 25, 1904) offers a method of treatment, using quinine locally in typical cases of hay-fever, which has proven remarkably successful in his hands. The treatment consists of the employment of a saturated solution of the quinine sulphate in sterilized water, as a nasal spray, and the application to the mucous membrane of the nares of an ointment consisting of quinine and vaselin in the proportion of thirty grains to the ounce, the applications being made every four or six hours. After trying various unguents and combinations, Fulton found simple vaselin to be the best. The white vaselin is not suitable, nor is the liquid vaselin. Lanolin is an ideal base, but is too offensive to the sense of smell. The use of the spray alone will not

suffice, but should be used as an adjunct to the ointment. Spraying the nares will at once stop all symptoms of coryza, but the effect will not be maintained long unless followed by the thorough application of the ointment. This may account for the failure of this treatment as first suggested by Helmholtz, who employed only the spray. The application of the oinment should be made at least every six hours, and it may be necessary to repeat it every 4 hours. An application at bedtime, and 2 or 3 o'clock in the morning, will prevent all symptoms through the night. Two or three applications of the spray should be made in the 24 hours, at the time when the patient has found the irritation to be at the maximum degree of intensity. In respect to the mode of using ointment, the little finger is the most convenient applicator.

As far as the effects of this simple remedy have been observed, the results are as follows: Used according to the foregoing suggestions, the symptoms of coryza are immediately removed, nor will they return as long as the treatment is continued. The usual accompanying irritation of the conjunctivæ, of the Eustachian tubes and palate quickly subsides. Opportunities have not been made so far to test this treatment in irregular types of the disease, or to estimate how far these results may be modified by individual peculiarities, but as far as its effects have been noted it seems fair to conclude that hayfever subjects will find this a remedy of actual value, and that it will promptly and completely relieve a large proportion of these cases.—*Medical Age.*

A New Hemostatic.—A German investigator has recently obtained from the spleen, by antolysis, a new drug which he claims possesses great hemostatic properties. He claims to have treated successfully a number of cases of menorrhagia and metrorrhagia. The drug acts locally in a chemical way by coagulating the blood. While the inventor has not sufficient evidence at present he believes that it will be of value in the various internal diseases accompanied by hemorrhage, such as gastric ulcer, intestinal or pulmonary hemorrhages, etc. The drug is an extract from the spleens of horses, obtained by a method of antiseptic antolysis. A number of experiments on animals showed a reduction in the blood pressure and apparently an increased tendency of the blood to coagulate. The good results claimed from the use of this new drug may result in adding a styptic worthy of more extended trials. —*Medical Age.*

Deaths From Patent Medicines.—The daily papers report the death of three children in one week due to eating drugs left within their reach. Two of these cases are so flagrant that we feel constrained to call attention of physicians to them through the columns of this journal.

The *Examiner*, of the 15th, reports one child who died "after eating red pills found in the back yard;" a second child "died after eating "Pierce's Pellets," which had been left on his doorsteps as a sample package." The third child is reported to have died from the effects of strychnine which had been carelessly left within reach of the child by some member of the family.

It would seem that it is about time to have a stop put to the practice of leaving patent medicines in front yards and on door steps.

The heartlessness of the manufacturers who, for the sake of gain, are willing thus to sacrifice innocent children or

even adults, passes our comprehension. This is, however, on a par with the milk producers who have no conscience about distributing impure or even infected milk to families. Both are alike criminals and should be treated accordingly.

Of course nothing can be done to prevent this distribution of poison over the community until the public conscience be aroused, and this, we know, is a very difficult proposition. Still we are in hopes that by keeping up the agitation the time will come restraining laws will be enacted and enforced because the public will demand them.

In some way our babes should be protected from these wolves. As for adults, if they want to take chances let them eat these samples; no sympathy should be wasted on them, while to convince them of their folly time is worse than wasted.—*Pacific Medical Journal.*

How the General Practitioner Should Treat Gonorrhœa.—The following is an abstract from article read by Dr. Fred C. Valentine:

1. Every general practitioner is practically competent to treat successfully uncomplicated gonorrhœa, if he will devote as much attention to this as he does any one other disease.

2. Every patient with gonorrhœa is entitled to the services of his family physician just as much as if he had acquired any other disease in consequence of drunkenness or other violation of ethics or morals.

3. The general practitioner who declines to treat uncomplicated acute anterior gonorrhœa avoids one of the most sacred duties to the profession and to humanity.

4. The patient who, because he has gonorrhœa, is refused the services of his own physician, is likely to become an opponent to scientific medicine, to the detriment of his own health, that of his family and of the community.

5. The scientific treatment of at least acute anterior uncomplicated gonorrhœa is perfectly within the power of the general practitioner.

6. The irrigation of gonorrhœa is, as yet, the most effective method, and that most in accord with the modern scientific understanding of the disease.—*New York Medical Journal,* July, 1904.

But One Case of Appendicitis.—Dr. D. A. Stapler, *California State Journal of Medicine,* discusses the many theories as to the cause of appendicitis, and finally concludes with the assertion that infection is the one cause; that all other conditions are only predisposing causes. He states that it is possible for a grape seed, fish bone or some other foreign material to get into the appendix and produce trauma, thus opening up an avenue for infection, and an acute inflammation of the organ is the result, thus giving us our initial attack. If the blood is good a round cell infiltration takes place, and the infected area is walled off. Nature has repaired this lesion with new tissue, which constricts the appendix and so compresses the artery of the appendix that the distal end of the organ suffers nutritional changes, the vitality of the cells is lowered, and a very rapid gangrene takes place, and frequently nature is unable to throw up a protecting well, and a general peritonitis is the result.

Little difference does it make what the primary offending agent is, the only role that it plays in the production of appendicitis is to lower the vitality of the cell allowing the ever present bacteria to gain entrance to suitable pabulum and grow, the result of which is

inflammation. Fecal concretions are forced into the lumen of the appendix, a peristalsis is set up, the foreign body is forced farther into the appendix, and by its pressure against the walls of the organ shuts off the blood supply and cellular death takes place, infection follows, and an inflammation is the result. If the bacteria were absent the organ would slough off, and nature would soon repair the injury. Dr. Stapler closes by saying that appendicitis is caused by loss of tissue with subsequent infection. This loss of tissue can be caused by capillary hemorrhage due to infectious diseases or by over exertion or by foreign bodies. No appendicitis without infection, no infection without loss of tissue.—*American Practitioner and News.*

Value of the X-Ray in Cancer.—In a very excellent article in the *American Journal of Surgery and Gynaecology,* for March, 1903, Dr. A. R. Robinsan, Professor of Dermatology in the New York Polyclinic, sums up as follows:

1. The Roentgen ray is a very valuable addition to our armamentarium for the treatment of cancer.

2. Some cases of advanced epithelioma are incurable except by the rays.

3. Many of the cases cured and regarded as inoperable by other means could have been quickly cured in an early stage of the disease; hence physicians should devote proper attention to this serious disease; much more attention than they have as yet given it.

4. The majority of cases so far reported as cured have been cases that could have been cured much more quickly by the knife or caustics, especially by the latter.

5. In cutaneous cancer the scar is sometimes better after the ray treatment than after the use of caustics, but for the majority of cases caustics are preferable, as their action is definite and there is a great saving of time to the patient.

6. In many cases of cutaneous cancer the ray is a valuable agent in combination with other methods, and when the disease is situated around the important blood vessels it is the only proper agent to employ, except in some cases on the extremities, where amputation would be advisable.

7. All cases of carcinoma of the breast, except those seen in a very early stage, should be treated by the rays before resorting to the knife. The rays should also be used in all inoperable cases after amputation has taken place.

8. According to our present knowledge, the X-ray treatment is not curative in internal cancer of any part of the body—mouth, larynx, stomach, uterus, etc.

9. To obtain the best resules there must be no fault in the technique of the operation, in order avoid a serious burn and to get the desired action on the cancer tissue.—*Medical Review of Reviews.*

White Vaseline for Erysipelas.—The new treatment for erysipelas, according to the *Dietetic and Hygienic Gazette,* consists simply in covering the affected area and a portion of the surrounding skin with a thick layer of white vaseline.

This, in its turn, is covered with a mask of linen, and held in position by means of gauze bandages. The application is made twice a day. The results obtained by this method are very favorable and gratifying when compared with those following other methods, as painting with tincture of iodine, ichthyol or sublimate solution, etc. Fever, as a rule, diminished in two or three

days, pain and tension in the afflicted parts were relieved and recurrences were observed with no more frequency than in cases in which other methods were employed. The advantages claimed for this treatment are the absence of pain and irritation which accompany the application of iodine or of the bichloride.

For Menopausal Headaches.—Dr. Leuf makes a statement that many cases of menopausal headaches yield to aconite, in drop doses of the tincture, given hourly or half hourly until effective. If elimination if effective, five-drop doses of the wine of colchium often gives surprising relief. Severe throbbing headaches are often quickly relieved by veratrum viride, of which five or ten drops of the fluid extract may be given at hourly intervals until effective, and continued thereafter as needed. If the pain is due to excitement, there is nothing better than bromides, one-half drachm in a goblet of water.—*Medical Summary.*

An Effective Means of Disinfecting the Hands.—The best method of preparation of the hands that I have employed is the one that has been so well described by Dr. Robert F. Weir. It consists in sterilizing the hands by means of nascent chlorine gas. The surgeon takes in one hand a heaping teaspoonful of commercial chloride of lime and an equal quantity of powdered carbonate of sodium. If water is then poured into the hand, the two powders make a paste in which a reaction rapidly sets free chlorine gas, and if this mixture is thoroughly rubbed over the hands for two or three minutes, we get a very complete sterilization of the skin without much injury to the epithelium. At one of the hospitals in which I sometimes work continuously at operating from morning till night, this preparation of the hands has been the only one that has allowed me to escape after the day's work with my hands in condition for operative work on the following day. The only objection to this method, that I know, is one that concerns the nurse, for if the mixture of chloride of lime and of carbonate of sodium happens to get upon towels or linen it will injure the fabric.—*Modern Medicine.*

Vitality of Germs of Diphtheria for a Long Time.—A health officer in Mecosta County reports to the Secretary of the Michigan State Board of Health that twenty years ago Mrs. T. lost a daughter by death from diphtheria, and then some of the girl's clothing was put away in a chest and nailed up. The chest was not disturbed until this spring when the mother, 75 years of age, opened the chest and looked over the clothing, soon after which she was taken sick with diphtheria, and died June 17, 1904. The health officer believes she contracted the disease from the clothing infected twenty years ago.—*American Practitioner and News.*

For Habitual Epistaxis.—In habitual epistaxis, without regard to the cause, the frequency of the attacks, or their severity, Woodward says ammonium carbonate is an absolute specific. Two grains every ten minutes will stop the flow quickly during the attack. To correct the tendency and overcome the habit, 2 grains should be given from three to six times each day.—*Medical Summary.*

Abdominal Pain and Pneumonia.—G. H. Scott, in *Boston Medical and Surgical Journal,* reports the case of a girl of twenty years, whose first symp-

tom was severe umbilical pain, radiating from this point downward and laterally. At first, it was sharp, but later, merely a dull ache. There was a moderate febrile movement and a few rales heard in the chest. The next day the symptoms present were those of an acute bronchitis. The condition gradually became aggravated, and on the fourth day of the illness, though the abdominal symptoms had subsided, it was possible to make out an acute lobar pneumonia of the right upper lobe. At this point the patient complained for the first time of pain and constriction in the chest, but curiously enough, on the left side, which was normal. The patient than ran a typical course of pneumonia, the temperature falling by crisis on the twelfth day after the original onset of illness. On the second day of the pneumonic process the abdominal pain returned, and continued in slight degree during the entire course of the disease, subsiding entirely at the crisis, never to recur. There were no other abdominal symptoms nor any abdominal signs. Convalescence was rapid and perfect. Four weeks later an acute beriberi developed (the woman lived in the Philippines), and death occurred eighteen days later.—*Medical Record.*

The Effect of Revaccination during Pregnancy of the Child.—By J. W. Ballantyne, (*Progressive Medicine,* Vol. III., page 295). Numerous cases are on record to prove that revaccination of pregnant women may render the infant temporarily insusceptible to vaccination after birth, while statistics show that such cases are not always immune. The percentage is entirely too high to be accounted for by idiosyncrasy or accidental cause, the proportion being anywhere from 32 *to* 80 per cent., and he concludes that it is safe in saying that one out of every three is protected by the vaccination of the mother in second pregnancy. He admits that it is true that an infant has never been born with a vaccination pustule on it as the result of the vaccination of the mother, but similarly an infant has never been born with the primary sore of syphilis upon its benital organs. This is explained by the fact that the point of contact of mother and fetus is in the placenta and not on the fetal cutaneous surface, so that if vaccination mark occurred in antenatal life it would have to be looked for in the placenta. Protection is either afforded by a direct transmission of antitoxine elaborated in the maternal tissues of the child, or what is more probable that the immunizing agent passes to the fetus and acts on its fluids and tissues, and that these elaborate the antitoxine. It is also proven that this immunity does not last long, possibly not over six months.

The immunity is comparable rather to that produced by immunizing serum than to the protection conferred upon the infant after birth by an arm vaccination.

The conclusions are that in epidemics of small-pox that every pregnant woman should be vaccinated or revaccinated for the sake of her unborn child, if not for her own sake. It is also noted that the infants of women who have been revaccinated during pregnancy without success, owing presumably to earlier vaccination, may yet be born with a certain degree of immunity. This was shown to be the case in 31 out of 44 unsuccessful revaccinations.—*Am. Practitioner and Med.*

The Treatment of Post-partum Hemorrhage.—Fritsch says that post-partum hemorrhage due to atony is usually im-

proper management of the third stage, *i. e.,* under haste to express the placenta or premature massage of the fundus. This causes partial separation of the placenta while the utureus is still unable to contract firmly on account of its contents. Packing the uterus requires time and experience, and considerable blood is lost in executing it. The author's method consists in seizing the uterus with both hands and expelling all coagula, and then lifting it upward and forward so as to anteflect it forcibly over the symphysis. The abdominal wall is then pushed deeply into the pelvis behind the uterus and the depression so formed filled with towels, cloths, gauze, or anything available. This mass is secured by several turns of a bandage very firmly applied, and one or two more turns are placed over the fundus so as to press it against the posterior pad. In this way the uterine cavity is obliterated so that no further bleeding can occur, and no asepsis or intrauterine after treatment required. The apparatus does not give pain, and is removed at the end of eight to twelve hours. Suturing lacerations to check hemorrhages is poor practice, because it is not possible to carry the needle deep enough without risk of injury to the ureter, and tumponnade is not effective if a large vessel is torn across. The author has found the following the best plan: Remove the placenta and press the uterus deep into the pelvis with the right hand. Catch the labia majora with the fingers of the left hand and push the vulva upward as if to meet the uterus. Forcible pressure in this way obliterates all dead space, and at the end of one-half to three-quarters of an hour the upper hand may be replaced by a sandbag or other suitable heavy object.—*Medical Record,* January 30. 1904.

The Real Place of Alcohol in Medicine.—In the course of an editorial on this subject the *Medical News* of November 14, 1903, sums up the facts as follows:

The true place of alcohol in medicine, then, is as a transient, highly diffusible stimulant, incident to its active portal oxidation, and directly, as an oxidant, for the purposes of clearing the portal circulation and for assisting the hepatic combustion of certain foods, which is accomplished by the more diffusible (highly alcoholic) liquors.

In clearing the portal circulation the active combustion of alcohol acts similarly to that of the fruit acids, which are so popular among hearty eaters for this purpose. For the restoration of appetite and digestive ability, which formerly was afforded by an orange or lemon, the advanced epicure finds the more highly diffusable and combustible cocktail necessary with which to precede his meal.

Medical men can and do make legitimate use of alcoholic liquors for the above therapeutic ends, and by regulating the amounts and varieties, the time of taking, in relation to food, etc., maximum good and minimum evil can be attained in appropriate cases. Continued tippling and periodic sprees are equally degrading to the body as a whole. The ignorant or rash uses of alcoholic beverages are the chief causes of mischief which is due to them. There can be no doubt but what, all points taken into consideration, the race as a whole would be far better without them.

The many diseases due to inerbrity, it will be observed, are of the degenerative type, and are all due either to hyper-combustion (fibrosis, sclerosis) or to suboxidation, viz.: all kinds of degradation and degenerations of the brain, nervous, muscular and vascular systems.—*Therapeutic Gazette.*

Asthma.—Saenger describes a simple method he has found of great use in treating nine cases of asthma, of which the hostories are given. His theory is that the deep inspirations the dyspnoic patient endeavors to make only serve to aggravate the existing overdistention of the lung and increase the distress. The patients should therefore be encouraged to inhale as gently and scantily as possible, and to make the expirations equally gentle but more prolonged. In order to effect this more easily, he has them count aloud, one count a second, up to four or five during the expiration, take a short inspiration, and so on, the diversion of the attention required also assisting to make the dyspnœa less urgent. Between the attacks similar exercises are systematically practiced, extending the counting up to thirty or forty in the course of time. In this way the patients are inured to dyspnœa, a sit were, and bear the attacks much better. The frequency of the attacks is also greatly diminished.—*Medical Record.*

Treatment of Pulmonary Tuberculosis

Seventh report of the committee of inspection appointed by the executive committee of the Post-Graduate Medical School to review the experiments of Dr. John F. Russell in the treatment of pulmonary tuberculosis at the Post-Graduate Hospital, New York, May, 1904.—*Post-Graduate.*

Bickerton and Barstow report a number of cases who made a complete recovery on the Russell treatment.

The treatment in brief is as follows:

Each patient comes to the dispensary twice each day—in the morning any time between 7 and 9 o'clock, and in the evening between 7 and 8 o'clock. They are given the Russell Emulsion of mixed fats at such times, they are also questioned and advised. Sunday morning they report at 9 o'clock, when they are stripped, weighed and examined. Women are weighed in their night dresses.

They are taught to sleep with their windows wide open; to eat all they can at each meal, to take a stated quantity of milk and eggs, to allow an interval of five hours between meals. The value and importance of cathartics is impressed upon them. They are taught to avoid overclothing, to keep the feet dry and warm, to obtain nine hours sleep at night when possible, to avoid places of amusement. Alcohol, tea, coffee, and all unnecessary exercises are forbidden.

The beginning dose of emulsion is one-half ounce, gradually increased until from two to four ounces are taken each morning and evening. Castor oil is the main cathartic used. This is taken at first three times each week until the patient gets to full doses of emulsion and full general diet when, in some instances, a dose is taken each day. When castor oil is not given every day, some other cathartic, usually compound rhuburb pill, is given the intervening day.

The rules are carried out with great strictness and patients are made to understand that they must obey. In case of disobedience they are at once dismissed. This sometimes becomes necessary.

The Nature of Solutions.—Using the new microscope of Siedentopf and Zeigmondy (quoted in *Medical Record*), which is capable of rendering visible particles only one-tenth micro-micron in diameter, Raehlmann has discovered that solutions are really composed of minute particles which appear to be characteristic in form and motion for each substance. In albuminous solutions the particles are so densely crowd-

ed together that only in a solution of 1:100,000 is it possible to distingish them separately. Glycogen particles can be recognized in a dilution of 1:3,000,000 and have a diameter of about 60 micro-microns.

The Art of Prescribing.—At the present time one of the weakest points of the medical curriculum is the inadequate training given the student in the are of prescribing. Very few recent graduates are able to write their prescriptions in such a manner as to stand criticism As a result of this deficiency many practitioners prescribe almost nothing but proprietary articles, of which they know nothing, except what they may be able to learn from the advertisements and pamphlets of enterprising manufacturers. The art of combining drugs to effectually meet the various conditions that arise in the patient's condition is one that has been indeed too much neglected. More time should be devoted to the teaching of laws of chemical and therapeutical incompatibility. If this be done the physician would not have to depend upon combinations already prepared for him, and his patients would receive truer and more scientific treatment.—*Med. Age.*

The Unnecessary Wearing of Glasses.—For a great many years much has been said and written about the benefits of glasses in various conditions referable to the eye and its neighboring parts, and much relief from headache and eye pains has followed education in this direction. There are thousands of martyrs to the sufferings caused by uncorrected errors or refraction and of the ocular muscles; but it is also true that many unnecessary pairs of glasses are worn because they have been prescribed for the relief of symptoms which they could not possibly remove.

It would be absurd to underestimate the value of glasses, not only in the improvement of vision, but also in the relief of pain and discomfort referred to the eyes and head, and often in the indirect benefit to the general health. But enthusiasm in prescribing glasses ought not to allow us to overlook or ignore the existence of local conditions of the lids which are often responsible for various symptoms conveniently included in the term asthenopia. There are many instances in which discomfort after close work is not due to eye-strain but to conjunctivitis; the latter may appear insignificant and yet may be sufficient to cause the symptoms on account of which, not infrequently, glasses are unnecessarily worn, as will be proven by the relief following local treatment of the conjunctival affection.

Glasses can never be regarded as ornaments; they are always more or less of a handicap to the personal appearance; they should not be inflicted upon patients unless they improve vision or correct an ametropia which is responsible for annoying symptoms.

The greatest number of instances of the misuse of glasses is furnished by the so-called prescribing optician, who is naturally merely interested in the quantity of glasses which he can sell. But even in legitimate prescribing it is well to remember, that although a small amount of ametropia often causes disturbances which are promptly corrected by the wearing of glasses, abnormal conditions of the conjunctiva, even though they are unaccompanied by marked changes, may be responsible for symptoms incorrectly attributed to eye-strain, and that in such cases the relief from discomfort by local treatment of the lids will be particularly appreciated

by the patient because it will save him from the unnecessary wearing of glasses.—*Daily Medical Journal.*

Clean Money.—A cry has been raised for clean money, among other cries for asepsis in this anti-septic age, and although many of the demands made in the name of Public Health are of the nature of "Fads," the clean money cry seems to us both reasonable and worthy of consideration by the powers that be.

So long as paper money is in use, and we see no prospect of its being supplanted while the dollar retains its present unwieldy proportions, to say nothing of the financial side of the question, which not being experts in these matters, we leave to bimetallists, monometallists and Wall street magnates,—so long, then, as the paper currency exists it provides extraordinary facilities for the circulation of germs, bacilli, *et hoc genus omne,* and the condition of many of the bills in daily circulation makes it at least probable that they may assist in the multiplication, as well as the transmission of infective germs. It may be safely asserted that the septic properties of a bill are in inverse ratio to its monetary value, so that the introduction of two-and-a-half-dollar gold pieces and the substitution of the five-dollar gold piece for its paper equivalent would do a little to mitigate the evil, and the abolition of the paper in favor of the silver dollar would, in the East at any rate, be bitterly opposed by the public. What, then, remains for the reformer to do?

We can see only two methods of dealing with the problem:—either by limiting the life of each bill as issued, in a similar way to that enacted by the postoffice of Great Britain with its postal money orders, which are redeemable only three months after the date stamped on face of order by issuing office, or by arranging for the systematic sterilization at stated periods of all bills passing through the banks; and of these two schemes the latter seems to us the more practicable, because it cannot in any way interfere with the quick handling and counting of bills, as would be the case were it necessary to verify the negotiability of the note by comparing its date of issue with the calendar. The setting up of sterilizing chambers in banks and public offices would be a matter of quite insignificant expense, while the benefit therefrom must be obvious to everyone who habitually receives bills as change from the butcher, the fishmonger or the unwashed proprietor of greasy pockets, and possibly of a family, members of which may be suffering from infectious disease.

We cordially echo, therefore, the cry for clean money, and would only add, "Let there be plenty of it."—*Medical Mirror.*

Local Anaesthesia for Inflamed Tissues.—A valuable local anæsthetic for inflamed tissues can be had by adding a few drops of 1-1,000 solution of adrenalin to a ½ to 1 per cent. solution of cocaine. In injecting this, the first result is an anæmia of the skin, due to its action on the vasoconstrictors, followed by a deep anæsthesia. Incisions can be made into inflamed tissues with the loss of very little blood, and the method is well adapted for furuncles, anthrax, etc.

His Preference—Wife: "John, I wish you would mind the baby for an hour or two. I'm going down town to have a tooth pulled."

Husband (inspired): "You mind the baby, my dear, and I'll go down town and get a couple of teeth pulled."—*Chicago News.*

NEWER MATERIA MEDICA.

Chorea and Anemia.

By Roshier W. Miller, M. D., Ph.G., Barton Heights, Va.

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In the etiology of chorea, nothing is noted relative to anemia. It is simply accounted as an accompanying symptom of the condition. Medical literature emphasizes the relation between rheumatism and chorea, with anemia as an important symptom. After observation of several cases, I am strongly of opinion, however, that anemia as a causative factor is worthy of investigation.

Anemia of toxic origin presents pathological conditions which favor the production of choreatic affections. It is true that simple anemia is, as a rule, of secondary origin, and, viewed in this light, it may be argued that if chorea arises, it is the result of the primary and not of the secondary conditions—thus argument, however, will not satisfactorily explain those cases of chorea which arise remotely from the primary condition, but recently from the secondary effects.

I submit three cases in which symptoms, treatment and recovery seem to intimate at least a possible relation between anemia and chorea.

CASE I.—A female child of eight years gave a history of typhoid fever eight months prior to my visit. According to the mother's statement, the child had made a quick and good recovery, gaining rapidly in weight and exhibiting the energy of her former life. Six months later she became irritable and pale, with pain in her arms and legs, which condition was soon followed by gastric disorders and irregular spasms of the muscles of the face. Simple anemia was in evidence from objective and subjective symptoms alone, but was unquestioned in the light of the results obtained from blood examination—the red blood element being present to the extent of barely 3,000,000 red corpuscles per c. m.

This case was treated with two teaspoonfuls of pepto-mangan (Gude) and two drops of Fowler's solution, three times a day. After gastric symptoms had abated somewhat, two raw eggs per day were added to the diet. The patient was discharged in five weeks, completely recovered.

CASE II.—A female child of ten years of age; gave history of malaria (a well-defined case of intermittent fever) one year previously. The pallid condition of the child induced the mother to solicit my aid. Upon examination, I found slight choreaic movements which had escaped the mother's eye, though she did admit that child "could not sit still very long at a time," and "was constantly working her fingers." The blood examination revealed no plasmodium. The red cells were reduced to 2,800,000 per c. m., with a proportionate decrease of hemoglobin.

Pepto-mangan (Gude) alone was employed in doses of two drams in a glass of milk three times a day. The blood examination four weeks later showed red cells present to the amount of 3,900,000 per c. m., at which time I dismissed the case completely recovered.

CASE III.—A female child of thirteen years. Two months before my visit, the mother informed me, the child became peevish and pale, and was reproved at school for her inability to write neatly. She was taken from

school, but she grew rapidly worse. Morning nausea, vomiting, headache, and anorexia were her daily companions. I found her with pronounced histrionic spasm with involvement of the upper and lower extremities. Hemic murmurs were plainly apparent, but no endocardial irritation could be determined. The blood count showed reduction in red cells to 2,100,000 per c. m. The hemoglobin was reduced to a degree greater than the red cells. A curious feature of the case was the morning nausea. Immediately upon awakening, she experienced nausea, which was followed by vomiting. I discovered, however, that this condition was superinduced by odors from the kitchen, and directed that a small sponge, moistened with creosote water, be placed over the nose and mouth before the preparation for breakfast began. The annoying symptom was promptly checked by this simple method. The anemia in this case may have been produced by malnutrition, but even this view is mere speculation.

The irritability of the stomach in this case was so pronounced that I did not deem it wise to give nourishment—not to speak of medicine—by the stomach. During the first four days rectal alimentation was employed. A nutritive enema, consisting of four ounces of peptonized milk and two drams of pepto-mangan (Gude), was given every six hours. Small amounts of peptonoids with creosote on ice were given by the stomach. Egg albumin was taken in all the water she drank. After four days, the stomach was tested with small amounts of milk and pepto-mangan (Gude). Beginning with four ounces of milk and one dram of pepto-mangan (Gude) every four hours, the amounts of each were rapidly increased, until after three days the patient was taking eight ounces of milk every two hours and four drams of pepto-mangan (Gude) three times a day. This diet, plus three raw eggs a day, together with the above treatment, was all that was employed for six weeks. The blood examination at this time showed a highly gratifying condition—the red cells being present to the extent of 4,100,000 per c. m. The bloom of youth once more tinted the cheek, and the shrine of St. Vistas lost a visitor.

Alkalometry—What is it?—(1) The administration of small doses of the most active and potent known remedies (chiefly alkaloids and other active principles representing the majority of all the accepted vegetable remedies) at short intervals until either *remedial effect or signs* or drug *sufficiency,* the full physiological effect of the drug are apparent.

(2) The exhibition of such doses in the form of tiny soluble granules or tablets, each containing a definite amount (usually gr. 1/134, 1/67, 1/6, or 1/3 of the drug.

(3) The additional use of such solvents, eliminants, vital incitants and local and systematic antiseptics as have proven by extensive clinical test, of considerable remedial value.

(4) The freedom to use any and all remedial agents—always in the purest and most concentrated form available—that will produce definite results in a recognized condition.

(5) The absolute avoidance of promiscuous formulas, problematical remedies, crude drugs (vegetable) and nauseous, changeable, alcoholic tinctures and fluid extracts when the active (remedial) principle of the drug can be given in its purity in effective well-established dose.

WHAT IT DOES.

(1) It cures—where it is possible to cure—*cito tuto et jucunde*. Its chemistry is done outside the sick body.

(2) It gives the maximum obtainable results in the shortest possible time, with absolute safety and with no possibility of overdose, or cumulative effect.

(3) It enables the practician to give the most potent medicines to the youngest infant or the most squeamish invalid without the aid of scales, measures or menstrua.

(4) It enables the doctor to push a remedy to *effect* without wondering whether he has poisoned that particular patient in his effort to give enough.

(5) It makes it possible for the practician to have always with him an emergency case filled with standard medicaments of unchangeable strength and consistency for acute practice and urgencies, thus enabling him to treat conditions when they need treatment and he can do the most good.

(6) It enables the doctor to practice the most certain, safe and efficient method at a nominal cost.

(7) It eliminates "chance" and, in its perfectness of diagnosis and application, makes medicine "an exact science," or as near that as it is possible to attain.

Faulty Elimination is a prolific source of trouble and the cause of many distressing symptoms pointing to no definite lesion, but complicating and obscuring the actual symptoms of a real disease. Such a condition is puzzling to the doctor and discouraging to the patient, often causing dissatisfaction with the treatment and lack of confidence in the physician, yet the whole train of symptoms may be only the result of a lowering in the tone of the secretory organs and the retention of poisonous material in the system. In all conditions which follow as a result of the blocking of the eliminative organs, such as colds, bronchial catarrh, la grippe, pneumonia and autotoxia, one of the first indications is to bring the eliminating organs up to the normal and put them in condition to perform their natural duty. A large proportion of the cases which doctors are called upon to treat during the winter and in the spring are furnished by neglected colds and after-effects of la grippe These uncured affections keep the system open to new attacks, the patient develops a bronchitis, or pneumonia, the kidneys are affected and sometimes left permanently weakened. A cold is by no means a simple affair which, left to itself, will always speedily get well. The accute stage will probably spend itself, and the patient may think he is free from further trouble, but such attacks render him more liable to further infection, and pneumonia, chronic bronchitis, and chronic kidney disease are some of the sequelæ of frequent colds. Therefore, these apparently harmless colds are to be taken seriously and cured absolutely as soon as possible. To cut short these attacks and restore the tissues to normal powers of resistance the Dad Chemical Co. of New York, recommend Respiton. It contains asclepias tuberosa and berberis. A teaspoonful in a glass of hot water every two hours will effect a complete cure in a few days.—*Interstate Medical Journal,* April, 1904.

Blood Impoverishment.—In meeting that condition of the system embraced in the above headlines, is it not true that our first thought, and that to which our instinct naturally leads us, is iron? But viewed from the standpoint of now

accepted scientific facts, is this not looking at but one phase of the question? That there is a deficiency of iron in the blood in most forms of anemia is, of course, indisputable; and to supply this lack by the administration of iron seems but a common sense procedure. This practice would be sufficient if anemia were in reality nothing more than a condition of iron deficiency; but modern physicians know that the real underlying causative factor is a disturbance of the complicated processes of nutrition and metabolism, and that iron poverty is but one manifestation of this disorder. Sufficient proof of this fact has been presented to every physician when he has observed how anemic conditions persist in spite of the long-continued administration of iron. Here, then, iron must be supplemented by such remedies as have the ability to awaken the depressed nutritive and metabolic processes.

To invigorate, to rekindle nervous force, to revitalize all functions, and thereby bring about a condition of systemic vigor, of which blood enrichment is necessarily a feature, the addition of Manganese with iron is desirable. In Pepto-Mangan, iron and manganese was first brought to the attention of the profession by Dr. Gude, chemist, and this preparation is found to be one of the best therapeutic resources of the present day physician, and when combined with such other remedies as meet the indication, such as we have spoken of, forms at once a therapeutic arsenal whose fortress is impregnable.

Neurotic Conditions in Women.—Prof. Chas. J. Vaughan, Chair of Gynaecology, Atlanta College of Pyysicians and Surgeons, writes: "Neuralgia constitutes the great cause of danger from the employment of hypnotics and narcotics, which only afford relief by numbing, but effect no cure. On the other hand, the formation of a drug habit rather aggravates the condition from which relief was originally sought. Neurasthenia, neuralgia and other manifestations, either of an active or passive character, are common and are always peculiarly rebellious to treatment. Cerebro-nervous affections peculiar to women associated with pathological disturbances of the reproductive organs are legion, and most trying to physician and patient. I have found nothing so well suited to these cases as Antikamnia tablets, administered in doses of from one to three tablets and repeated every one, two or three hours according to the attendant's judgment. These tablets afford complete relief without fostering a drug habit and their exhibition is attended with no unpleasant after-affects. For the relief of painful menstruation there is no combination of remedies so generally successful as Antikamnia and Codeine tablets. Their sedative, analgesic and anodyne properties especially commend them in the neuralgic and congestive forms of this distressing affection."

Bruises, sprains and abrasions consequent upon tennis, golf, mountain climbing and other out-door sports are prevalent at this season. Infected wounds are frequent and disabling. Country life also brings the results of contact with poison-ivy, poison-oak, and the various venomous insects with their characteristic weapons of offense. In all these cases the physician's first thought should be Antiphlogistine. It reduces inflammation of all sorts better and more quickly than any other application, while for poisoned wounds and dermatitis venenata it is almost a specific.

ion among physicians as to whether the preparations of the active principles of cod liver oil fully replace the administration of the oil itself. There can,however, be no difference of opinion as to the superiority of those preparations during certain periods of the year. During the summer months especially we have found them of great use, for there is a marked loathness on the part of patients to take emulsion or preparations having an oily nature. Among these preparations we have Hagee's Cordial of Cod Liver Oil one of the most satisfactory. It is exceedingly palatable, can be taken by those with the most delicate digestion, without any disturbance of the same, and its effects are rapidly observed.—*Colorado Medical Jouranl.*

As an antiferment, to correct disorders of digestion, and to counteract the intestinal putrefactive processes in the summer diarrheas of children, Listerine possesses great advantage over other antiseptics in that it may be administered freely, being non-toxic, non-irritant and non-escharotic; furthermore, its genial compatibility with syrups, elixirs and other standard remedies of the Materia Medica, renders it an acceptable and efficient agent in the treatment of diseases produced by the fermentation of food, the decomposition of organic matter, the endo-development of fetid gases, and the presence or attack of low forms of microzoic life.

An interesting pamphlet relating to the treatment of diseases of this character may be had upon application to the manufacturers of Listerine.

Lambert Pharmacal Co., St. Louis.

Dr. J. L. Waffenschmidt, of Cincinnati, Ohio, who graduated from Miami Medical College in 1872, writing says: "My experience with Sanmetto has been pre-eminently satisfactory in all cases of irritable conditions of the urinary organs, and I prescrirbe it with a feeling of certainty of good results in catarrhal conditions of the pelvic organs and atonic conditions of the sexual glands. In cystitis, spermatorrhea, enuresis and loss of sexual power it is par excellence."

Opium Neurosis.—I am very much pleased with Sanmetto. It is a valuable preparation and should be in the hands of every specialist who treats the opium neurosis. In such conditions there is always considerable urethral inflammation besides other diseases of the genito-urinary organs; but opium users are obliged to take twice the quantity of Sanmetto usually prescribed, to produce good results.

F. H. Griffin, M. D.

Germantown, Philadelphia, Pa.

The Postoffice Department has instituted a crusade against patent medicines, or to be more exact against the advertisements of these nostrums. The government chemists have discovered (?) that these much lauded remedies are not remedies at all and that many of them are positively injurious. To use the United States mail services for fraudulent purposes is illegal, and the advertising matter of these concerns will be excluded from the mails. It is also suggested that the newspapers carrying such advertisements will also be excluded. To both propositions there is strenuous opposition, and the original rulings of the Postoffice Department in this regard may be materially modified.

The Clinical Application of Ingluvin

Ingluvin is the name given to a preparation made from the gizzard of the domestic fowl. Since its introduction, no remedy of modern times has attracted more attention among physicians far and near nor received higher endorsement than Ingluvin, which is now supplied throughout the world. The product occurs in the form of a soft powder of a yellowish-gray color and a faint odor. It is almost devoid of taste. A slightly bitter after-taste is left, but this soon disappears. Ingluvin is insoluble in water and the usual menstrua. It can be administered, stirred into water or milk, or in tea, coffee, chocolate, wine, etc., if no therapeutical objection exists. Its feeble taste is easily disguised. Ingluvin is also put up by its manufacturers (Messrs. William R. Warner & Co.) in convenient 5 grain tablets. The dose of Ingluvin is from 5 to 20 grains. Spread upon bread and butter it may be conveniently administered to children. Ingluvin possesses the advantage of being compatible with alkalies.

As the gizzard contains no peptic glands, the undoubted efficacy of Ingluvin cannot depend upon the presence of a digestive ferment analogous to pepsin. It has been ascertained that its virtues reside in a peculiar bitter principle which enters into its composition. It is prescribed in the same manner, doses, and combinations as pepsin.

Ingluvin is prescribed in the vomiting of Pregnancy, Dyspepsia from Uterine Disease, Colic, vomiting caused by Alcoholism, and other digestive derangements. It is likewise beneficial in dyspepsia when produced by functional inactivity. It will promptly check the diarrhœa which is caused by indigestion. By reason of its influence upon the stomach and bowels, Ingluvin is capable of marked service in cases of cholera infantum and cholera morbus.

The evidence in favor of Ingluvin in all cases of gastric disturbance is overwhelmingly convincing as to its superior efficacy over pepsin, and its use should never be neglected in any case of gastric irritability, no matter what may be the cause.

From the preceding abridged account it will be seen that Ingluvin possesses an exceedingly important sphere of usefulness. Disorders of the alimentary canal exert such a widespread influence, they are so often linked with profound general disturbances, and they are so distressing in themselves, that any remedy which demonstrates its efficacy in regard to those affections should be warmly welcomed.

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BOOK REVIEWS.

Von Bergmann's Surgery. A System of Practical Surgery. By Drs. E. von Bergmann, of Berlin; P. von Bruns, of Tubigen, and J. von Mikulicz, of Breslau. Edited by William T. Bull, M.D., Professor of Surgery in the College of Physicians and Surgeons (Columbia University), New York. To be complete in five Imperial Octavo volumes containing over 4,000 pages, 1,600 engravings and 110 full-page plates in colors and monochrome. Sold by subscription only. Per volume, cloth, $6.00; leather, $7.00; half morocco, $8.50, net, Volume III just ready. 918 pages, 595 engravings, 21 plates. Lea Brothers & Co.

With the third volume of von Bergmann's System of Surgery before us, we are now able to form a better idea of its great value, both to the general practitioner and to the surgeon. It in every way comes up to our expectations, indeed, the third volume which deals with the surgery of the extremities, is of especial interest. The following subjects are concerned: Malformations; Injuries and Diseases of the Shoulder and Upper Arm; of the Elbow and Forearm; of the Wrist and Hand; of the Knee and Leg; of the Ankle and Foot.

As we stated in reviewing the previous volumes, the second German edition carefully revised and brought up to date in regard to literature and new matter, has been the basis of the present English translation. Moreover the corps of experienced surgeons who have translated the work, under the editorial supervision of Dr. Wm. T. Bull, have added those methods of practice which have gained preference in America. As a rule, in German works there are to be found few illustrations, but in the present volume there are 21 full-page engravings. This great work in its present form may, therefore, truly be regarded as reflecting the latest knowledge of the masters of surgery throughout the world.

International Clinics. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and Other Topics of Interest to Students and Practitioners. By leading Members of the Medical Profession throughout the world. Edited by A. O. J. Kelly, A.M., M.D., Philadelphia, with the collaboration of Wm. Osler, M.D., Baltimore; John H. Musser, M.D., Philadelphia; Jas. Stewart, M.D., Montreal; J. B. Murphy, M.D., Chicago; A. McPhedran, M.D., Toronto; Thos. M. Rotch, M.D., Boston; John G. Clark, M.D., Philadelphia; James J. Walsh, M.D., New York; J. W. Ballantyne, M.D., Edinburg; John Harold, M.D., London; Edmund Landolt, M.D., Paris; Richard Kretz, M.D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Carlsbad. Volume II, Fourteenth Series, 1904. $2.00 a volume. J. B. Lippincott Company, Philadelphia. 1904.

It is always a pleasure to receive a volume of the *International Clinics.* The editorial staff alone insures a splendid work. There are twenty-three contributors to the July number. Their articles are timely and well selected;

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SITUATION—Healthful, moral, condusive of study.

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they are concise and practical and at the same time original. The volume is especially well illustrated for a work of this character. Major Mason's article on "The Spread of Disease by Insects, with Suggestions Regarding Prophylaxis," is one which every physician should read, and is alone worth the price of tne book.

We wish to call attention to Bierring's article on "Gastro-Intestinal Arterio Schleriosis." He divides arterioschleriosis into four types, cardiac, renal, cerebral and gastro-intestinal and reports a number of cases of the latter type.

TRANSACTIONS OF THE AMERICAN ROENTGEN RAY SOCIETY. Fourth Annual Meeting, Philadelphia, Pa. December 9 and 10, 1903.

The Transactions of the fourth annual meeting of the American Rœntgen Ray Society is a very creditable volume. The book is well gotten up. The articles are instructive and interesting, and there are a number of beautiful X-ray illustrations.

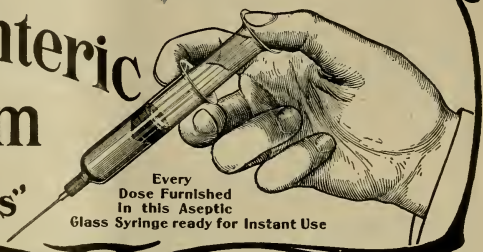
The society at present is in its youth and its membership is not large, but there is a field of great usefulness opening up for them in their special line of work. Every one recognizes the value of the X-ray, but it takes an expert to obtain the best results either as an aid in diagnosis or for its therapeutic action.

We have just received the Tuberculosis number of the *Colorado Medical Journal*. It contains the following important editorial announcement:

"With this number, the *Colorado Medical Journal* fittingly inaugurates

Anti-Dysenteric Serum

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Every Dose Furnished In this Aseptic Glass Syringe ready for Instant Use

The most promising Therapeutic Agent since Antitoxin.

PROF. SIMON FLEXNER, President of the Rockefeller Institute for Medical Research, and his co-workers, have proved by experiments extending over three years, that cholera infantum is usually caused by infection with the bacillus dysenteriæ (Medical Bulletin, University of Pennsylvania, November, 1902). During this period we have co-operated with Professor Flexner in preparing a serum for the curative treatment of cholera infantum and dysentery, and now offer, by his authority,

Mulford's Anti-Dysenteric Serum

from animals that have been thoroughly immunized, by a continuous treatment of nearly three years, against the bacillus dysenteriæ, and recommend its use in the treatment of cholera infantum and dysentery.

The serum is a mixture of that obtained from the blood of horses immunized with each of the different types of bacillus dysenteriæ, corresponding to those that do and do not ferment mannit.

Three-Fourths of the Mortality

occurring in children under four years of age is caused by cholera infantum, consequently, a curative serum that promises to reduce this mortality is a boon to humanity.

We are confident that Anti-Dysenteric Serum will reduce the mortality of cholera infantum and dysentery to the same extent that Mulford's Antitoxin has reduced the mortality of diphtheria.

Clinical Report

Shiga reports 1119 cases of dysentery treated at Tokio:

266 cases WITH serum, mortality, 9.6 per cent.
853 " without " " 32.6 per cent.

It is believed that cases treated early and with full doses will show a further reduction in mortality; the same rule applying with Anti-Dysenteric Serum as with Antitoxin.

The serum does not in any way conflict with the usual treatment, and is indicated in cholera infantum and dysentery, particularly when the discharges contain mucus and are tinged with blood.

DOSE.—For infants, 1 to 2 packages (10 to 20 c.c.); children and adults, 2 to 4 packages (20 to 40 c.c.) every four to eight hours. Mulford's Anti-Dysenteric Serum is furnished in aseptic glass syringes, each containing 10 c.c., price, $2.00, and may be secured from the distributors of our Diphtheria Antitoxin.

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In Malarial, after the subsidence of the acute attack, it acts almost as a specific and will be found particularly adaptable in the convalescence of all fevers and especially of Typhoid. As a remedy and cure of Influenza and Anemias of different types, Quin-I-Pep-tone is being extensively and successfully employed by prominent men in the profession of medicine, which stamps it as the ideal remedy in all cases where a general tonic is indicated. FREE—A full size 10 oz. bottle of Quin-I-Pep-tone will be sent to any physician paying express.

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a new policy of devoting much more attention to the subject of Climatology and Tuberculosis. This is but proper, taking into consideration its site of publication, the principal climatological resort for pulmonary invalids. In this way, without becoming exclusively a journal of climatology and tuberculosis, it will, in a great measure, fill the vacancy caused by the much-to-be-regretted suspension of the *Journal of Tuberculosis.* With this purpose in view we invite the contributions and support of all members of the profession interested in tuberculosis and general or local climatology."

In honor of this change in policy, they have gotton out an exceptionally interesting issue, containing, as it does, over 200 pages of reading matter and some 30 original articles on tuberculosis. The *Colorado Medical Journal* has long been one of our most valued exchanges. We wish them well in their new policy of devoting more time to tuberculosis. Their special number is one in which they may feel a real pride.

PROGRESSIVE MEDICINE, VOL. II, JUNE, 1904. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 334 pages, 47 illustrations. Per annum, in four cloth-bound volumes, $9.00; in paper binding, $6.00, carriage paid to any address. Lea Brothers & Co., Publishers, Philadelphia and New York.

We welcome Vol. II. Progressive Medicine, June, 1904, in its new paper bound form, which makes it mailable matter and enables the publishers to make a decided reduction in price. The contents show that the contributors

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Respiton, THE SKIN ELIMINANT,
Compels the skin to breathe naturally, without depression or abnormal diaphoresis; hence, the remedy for all Fevers.

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Compels the dermal glands to do their natural duty; hence, the remedy for Colds, Bronchitis, Pneumonia and other respiratory diseases.

Respiton, THE SKIN ELIMINANT,
Eliminates self-generated ptomaine poisons; hence, the remedy for chronic invalids.

Respiton, THE SKIN ELIMINANT,
Overcomes Faulty Metabolism; hence, indicated in all torpid conditions of the system.

Respiton, THE SKIN ELIMINANT,
Restores normal action to the eliminating organs; hence, the remedy for all pathological conditions with dry skin and dry secretions.

Dose: Half teaspoonful every two hours until better—then teaspoonful four times a day.

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The Eightieth Annual Session will begin Sept. 26, 1904, and continue eight months. For four annual sessions the curriculum provides without extra fee: 1. Practical manual training in ten different laboratories recently fitted up at heavy cost. 2. Recitations by the faculty and others. 3. Didactic lectures and demonstrations in the commodious new buildings. 4. Clinics and bedside ward work in small groups at the College Hospital; beside the clinics given by the staff of the college at the Pennsylvania, Philadelphia, German, St. Joseph's and Municipal Hospitals. 5. Lying-in cases at the College Maternity.

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J. W. HOLLAND, Dean.

know how to meet the exacting demands of modern medicine. The section on surgery discusses fully and illustrates clearly the use of the McGraw elastic bigature in making gastro-intestinal anastomoses and also the cure of gastroptosis by the suture of the gastro-hepatic and gastro-phrenic ligaments. Gastric surgery is attracting much attention and those who would keep abreast of the times would do well to read these articles. We would also commend the cuts illustrating manner of obstruction of the common bile, pan-

1876. 1904.

AT the opening of this Spring season we wish to extend an invitation to our friends, customers and the public in general to call on us and see the finest display of Spring Clothing, Furnishings and Haberdashery that we have ever had the pleasure of showing. Also a complete line of Hats, including all the latest styles in the celebrated Stetson Hats. ¶ Goods sent on approval returnable at our expense.

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creatic and santorini duets and diverticulum of vater by calculi of the liver and pancreas. The article on disease of the blood, the spleen, thyroid gland and lymphatic system by Dr. Stengel is masterly and filled with valuable points. These are a few of the chief attractions of this number. We regret not having space to mention others.

That *Everybody's Magazine* really has the biggest "scoop" of the era in Thos. W. Lawson's "Story of Amalgamated" is abunadantly shown by the first instalment of the series proper which is in the August number. The foreword was portentous with promise of startling disclosures. The initial chapters introduce the secret organization of Standard Oil and its actual master, who is a person almost unknown to the public. It is a wonderful unknown picture Mr. Lawson gives of the huge business machine which has its headquarters at 26 Broadway, New York, and he paints, for the first time in his real colors, the man he declares to be the greatest business genius of the period, Henry Rogers. Then, with brutal directness, he describes how in dividing the profits of the Amalgamated deal the biggest financiers in Wall street were tricked and deceived like the veriest crowd of tyros. It is the most sensational instance of the double cross in modern finance.

The unusual power and vividness of Mr. Lawson's writing would attract attention to subject-matter less important than the tremendous financial tragedy he has set out to give to the world. And it is impossible not to be impressed by the earnestness of the man in depicting the methods of the great monopoly. His disclosures can hardly fail to create a sensation which, as the other instalments appear, will be full of menace to the flagrant juggling with money and honor which apparently goes on in financial centres. Under the stimulus of these extraordinary articles the July edition of *Everybody's*, 300,000, was sold out a few days after issue, a gain of 50,000 over the preceding month. The issue for August, generally the dullest month in the magazine world, is 330,000 copies.

The interest of the August number of this magazine, however, is not confined to Mr. Lawson's article. It is a most attractive issue, full of readable articles and light and entertaining stories. Vance Thompson presents some captivating pictures of the leader of Parisian society, the Duchesse d'Uzes; another brilliant writer, Charles E. Trevathan, describes the fascinating life of Saratoga in the racing season. Lindsay Dension tells several amusing political experiences in "Campaigning by Special Train." A very personal and interesting study of Theodore Thomas,

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by Charles E. Russell, is particularly worth reading.

There are seven short stories—the longest, by Maximilian Foster, a capital picture of Hungarian children in the coal regions of Pennsylvania. O. Henry contributes one of his inimitable Central American comedies. There is a diverting society comedy by Justus Miles Forman, and a charming love-story by Emily Watson. The second instalment of Hall Caine's "The Prodigal Son" shows that in returning to the field of his early triumphs the Manx novelist has regained his old power. This story will surely repeat the success of "The Manxman."

The Psychology of Occupation.—After many years of inquiry an Italian savant, Ferriani, has constructed a scale showing the varying degrees of professional jealousy that exist in the different professions. He finds that among architects there exists the least. Following them come clergymen, lawyers, and military men. After these he places professors of science and literature, journalists, authors, doctors, and actors. From his classification it would seem that in only one other profession does jealousy exist to the extent that it does in medicine. It is indeed unpleasant to think that this investigator is right, but candor compels us to acknowledge to ourselves that we are a jealous lot. The average medical man is a good fellow among his colleagues until he commences to reach the top, and then he is immediately looked on with jealousy, and many mean and vicious remarks are made about him which would have been left unsaid had he never risen above mediocrity.—*Med. Age.*

The Marvels of Radium.—The peculiar properties of radium may well excite wonder and surprise. All the metal existing in the world could be contained in a teaspoon, and has cost thousands of dollars to produce. The rays, which are known by the name of Becquerel, after the French physicist, are also remarkable. A few grammes of the metal enclosed in a bottle carried in the vest pocket burned holes in the flesh in six hours, producing sores that took weeks to heal. These rays are also fatal to the micrococcus prodigiosus, and may therefore possess great medicinal virtue. The radio-active properties seem due to a gas. The energy of these rays is prodigious, and the source is yet a mystery. The evolution of heat appears to go on without combustion, without chemical changes, and without alteration of molecular structure. This state of things must have a cause, or is the law of conservation of energy a myth?—*Med. Age.*

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Indicated in all forms of debility, marasmus, poverty of tissue, arrested growth and development. Every condition where the nerve substance is at fault.

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We guarantee Nuclein W-A to be second to none. In fact, we believe it to be by far the best product on the market. It fulfills every indication and may be used in full confidence that it will produce every desirable effect that can be produced by Nuclein and to have no deleterious action whatever. It has the unqualified endorsement of hundreds and thousands of those well able to judge by results.

Solution or Tablets, per bottle - - - $0.55
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Nuclein is a phosphorized proteid forming the essential chemical constituent of the nuclei of cells. Its action, when administered in remedial doses, (more especially when the "blood-balance" is disturbed), is to engender leucocytosis, thus increasing the resistant power of the body to invading bacteria. Being, itself, the base and essence of cell life, it gives, to a depleted or worn-out system, the very material essential for fresh cell production. Hence it will be seen that its use is imperative in all dyscrasias, invasions by malific bacteria and conditions of destructive metabolism.

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(Iodized Calcium.)

It is not only a specific for croup but of special value in all non-specific, exudative conditions—fibrous pneumonia and bronchitis, uterine fibroids, etc. Markedly helpful in la grippe, hay fever, asthma and hoarseness of all kinds.

Supplied in powder or tablets (½ gr. each), per oz. of either, postpaid 50c. Per dozen, either kind or assorted (in lots of not less than ½-dozen), $5.00.

Directions for use and recorded experience of physicians who successfully use Calcidin, sent on request.

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MEDICAL NEWS AND ITEMS.

Prof. Lorenz sailed for home on July 7th.

There were 44,783 deaths from plague in India during the week ending April 30.

The fourth Pan-American Congress will meet in Panama the latter part of December.

New York comes up with a lower death rate and a higher birth rate for the first six months of the present year.

The second congress of the French-speaking physicians of America was held in Montreal during the first week in this month.

Wm. R. Warner & Co., of Philadelphia, Pa., have an interesting exhibit in the Palace of Liberal Arts at the St. Louis Exposition. They cordially invite all to visit their exhibit.

The American Neurological Association will hold its next meeting at St. Louis, September 15th, 16th and 17th. This will be immediately followed by the sessions of the various medical departments of the Congress of Arts and Sciences, beginning September 19th.

Dr. Francis T. Miles has resigned the chair of physiology and neurology in the University of Maryland. Dr. John C. Hemmeter has accepted the chair of physiology, and will retain the professorship of gastro-enterology.

Little Marie hated freckles, and with good reason, for she was like the proverbial turkey-egg. Her small nurse, Rhody, was as black as tar, except her beautiful white teeth.

One day Marie said regretfully "Wisht I was black like you, Rhody ain't nowhere for you to get freckles 'cept your teeth."—*Florida C. Orr, in July Lippincott.*

University College of Medicine,

RICHMOND, VIRGINIA.

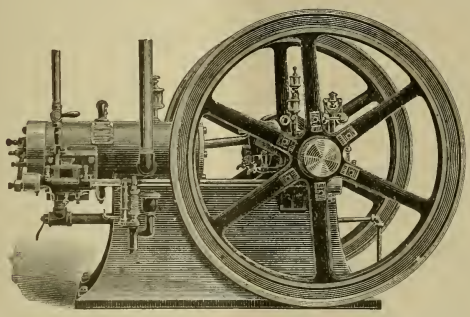
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Write for catalogue and particulars.

Dedication of Battle Creek Sanitarium.—The new sanitarium at Battle Creek was formally dedicated on May 31. There were 20,000 people present on the occasion.

To Test the Vaccination Law.—A case will come up in the United States Supreme Court in Washington which was docketed June 30th, testing the constitutionality of the Massachusetts Vaccination Law.

Roof Garden.—The Philadelphia Hospital has opened a roof garden for the open air treatment of tuberculosis cases. There is no better remedy on earth than air and sunlight for tuberculosis.

Keeley Cure

For Drunkenness and Drug Using.

Please write us. Correspondence confidential.

Our Illustrated Handbook Sent Free On Request.

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Insurance Examinations.

Physicians doing much work in examining applications for life insurance are often confronted with some perplexing questions in connection with submitting the papers, giving the results of his investigations to the scrutiny of the agent. There is in this course a violation of ethics, and a betrayal of professional secrets. The duty of the physician is to ascertain the physical conditions of the applicant and submit it to the medical director of the company. In his investigations there is often unearthed conditions that should be kept inviolate, as they were ascertained in his professional capacity. Many companies allow the privilege of sending applications direct to the home office, if deemed advisable, but all do not. To meet this state of affairs Dr. Gerrish, before the Maine Medical Society, quoted in an editorial (*Journal of Med. and Sci.*, June, 1904) suggests that all applications should be forwarded direct to the home office of the company, without inspection by any third party.

This suggestion we most heartily endorse, and trust that it will be adopted by all insurance companies as a means of obviating a manifest impropriety to say the very least of it.

There are Others.—Mifkins: "You have used the word 'donkey' several times in the last ten minutes. Am I to understand that you mean anything of a personal nature?"

Bifkins: "Certainly not. There are lots of donkeys in the world besides you."—*Chicago News.*

Philadelphia, through its officers, and with the assistance of the members of different medical societies, has instituted a crusade against illegal practitioners. Several have been convicted and others have been forced to leave.

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Medical syndicates have long since verified and established the difference in properties and quality, and class these mercantile oils, now principally in use for mechanical purposes, among the turpentines, unfit for internal medication. The characteristic difference with these mercantile oils consists: "in want of pungent odor; in the alcoholic thin and mobile appearance, being reduced in specific density through the presence of acids; in the taste, the result of the contracting tendency of resins and taunates."

We courteously advise the readers when ordering to apply to our agents, the Meyer Bros. Drug Co., St. Louis, Mo., who furnish one original package [one ounce] on receipt of one dollar. These packages carry literature comprising numerous reports of Physicians residing in the States, on the most gratifying services derived from the use of our product.

So says Dr. Baron Franks, Boston:

"The value of this medicine is very little known. Its advent ought to be hailed with enthusiasm, and I feel confident that it will be the most effective remedial agent in pharmacological science."

Many others make utterances of the same nature. To sustain the position acquired through strictness and punctuality in the process of production, we trust and hope the profession will assist in eliminating spurious counterfeits and in checking dishonest dealing.

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Successfully used for removal of CAPSULAR and LENTICULAR CATARACTS, CORNEAL OPACITIES.

Does not cause Inflammation.

Osmon Royal, M. D., Portland, Oregon, reports the following recent case in the Pacific Coast Journal of Homœopathy :

"Mrs C—, aged 73. The Oculist diagnosed her case as double cataract, and at her age, advised against operation. Prognosis : gradually increasing and finally total blindness. The physician commenced remedial treatment constitutionally, and local application of two or three drops twice a day of Succuss Cineraria Maritima (Barnes). The patient's general condition and the sight of both eyes has steadily improved, and while the sight is not fully restored, the results are so far satisfactory and decided as to warrant the belief that a complete cure of both cataracts will be effected."

Dr. Osmon Royal, under date of June 4th, 1903, writes :

"The patient referred to in the above article was entirely cured of her double cataract, and has now for more than two years had almost perfect eyesight. I attribute the result to the use of Succuss Cineraria (Barnes)."

Dr. E. V. Cobb, of Drayton, North Dakota, says of one case "vision improving slowly but constantly." Uses only Succuss Cineraria Maritima (Barnes).

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Shortly before adjournment Congress passed a law regulating the practice of medicine in Indian Territory. No one is allowed to practice without being registered in the office of the clerk of the United States court in the district. One desiring to practice must present his or her diploma to the board of examiners (appointed by the judges in the several districts) for the district. If the diploma is approved by the board, registry may be obtained without examination. No diploma issued after July 1, 1904, will be accepted, unless it has been granted by a college requiring a preliminary examination and a four-years' course of medical study. In the absence of a diploma or the possession of one not approved by the board, an examination will be required.

The thirtieth annual session of the Mississippi Valley Medical Association will be held at Cincinnati, Ohio, October 11, 12, 13, 1904, under the presidency of Dr. Hugh T. Patrick, of Chicago. The headquarters and meeting places will be at the Grand Hotel.

The annual orations will be delivered by Dr. Wm. J. Mayo, of Rochester, Minn., in Surgery, and Dr. C. Travis Drennen, of Hot Springs, Ark., in Medicine.

Request for places upon the program, or information in regard to the meeting, can be had by addressing the Secretary, Dr. Henry Enos Tuley, Louisville, Ky., or the Assistant Secretary, Dr. S. C. Stanton, Masonic Temple, Chicago, Ill.

The usual railroad rates will be in effect.

Electricity.—According to Sir Oliver Lodge, is better known than matter. That is to say, the laws of electricity

are better understood than a lump of ordinary matter. No one would deny that, since no one seems to know what matter really is. But it is true that electricity is better known that matter? Are not the laws of matter as clearly defined as the laws of electricity?

Listen to Sir Oliver: "We know more about electricity than about matter; and the way in which electrical inertia is accounted for electro-magnetically and localized in the ether immediately surrounding the nucleus of charge is comparatively clear and distinct." Now, what could be clearer than that? It is indeed so "clear" that when looked at one sees through it too suddenly to be comfortable. It's like looking through thin air into an abyss—it makes one dizzy.—*Central States Magazine.*

When the Doctor is Sick.

(By G. T. Palmer, M. D., Chicago, Ill.)

In my many years of labor
I have tried 'most every "stunt;"
Cured the yells of babes with colic,
Soothed the toper's gouty grunt;
Charmed the snakes of wiley boozers,
Quelled the nerve storms of the dames,
Shot with pills at strange diseases
When I didn't know their names.
I have patcht the voice of singers,
And have robbed the sneeze from grippe,
Knockt the chills clear out of ague,
Cured the small-pox every trip;
But one stunt has always floored me,
Always will—this little trick—
Giving pills and soft emulsions
To a docter when he's sick.
You have seen his sweet persuasion,
Heard him swear "it tasted good,"
Heard him say: "That will not hurt you"
(Then you'd vacate if you could);
Heard him swear he had no patience
With a man who couldn't take
Any sort of pill or nostrum
For his pain or for his ache.
Heard him tell you not to grumble—
"Grumbling does no good," says he,
As he rolls a nasty powder
In a paper on his knee.
Then you ought to see the doctor
When he's laid up for repair,
Ought to hear the old boy groaning,
Ought to hear the doctor swear;
And you ought to see the nurses
When the time comes for his dope—
If you had their job before you,
You would bid farewell to hope.

The worst of the pneumonia season is well over—only 82 deaths reported during the week. Since November 1, 1903, and up to the close of office hours May 21, 1904, the following are the figures for New York and for this city of deaths from all causes, from consumption and from pneumonia:

	New York.	Chicago.
Total deaths, all causes	45,402	16,343
From consumption	5,065	1,758
From pneumonia	9,648	3,648
Proportion per cent of all deaths—		
From consumption	11.	10.75
From pneumonia	21.25	22.32

Anaesthesia of rectum by sterile water.—Grant (quoted by *Med. Summary* June, 1904) uses sterile water injections to anesthetize the rectal tissues in operating on this section. Distension of the parts produces the anæsthesia, which is immediate. There is but little bleeding from this form of local anæsthesia, and after 150 operations under its use, this specialist commends the procedure warmly.

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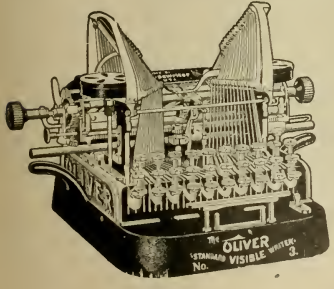
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After suturing a tendon, place the parts in such a position that the muscle and the tendon will be as thoroughly relaxed as possible.

When a fracture cannot be perfectly reduced and the parts brought into good approximation, it is pretty nearly malpractice to be satisfied with our efforts until we have tried anesthesia to the full surgical degree.

If the meatus needs to be split for the passage of sounds, remember that the posterior boundary of the fossa navicularis may be incised to the same extent as the latter before the instrument can be passed.

Formalin is a poor disinfectant when applied directly to the bladder, as it gives a good deal of pain if used strong enough to have an antiseptic action, and the solutions of from two to five drops to the pint, which alone can be borne, are practically uselss.

Don't let your paients see an operation that you are doing upon them under local anesthesia, and then ascribe their fainting to the cocaine. Remember also that men, however strong they may look, are more apt to faint at the sight of blood than women.

Don't use ice in the treatment of paraphymosis. It can do no good, and increases the tendency to sloughing in parts the vitality of which has already been impaired. Go to work and reduce the constriction at once, by manipulation if possible; by the knife if necessary.

When there is considerable bleeding from a needle-cut after passing a suture through the skin, withdraw it and place it further on, as the accumulation of blood under the skin may be considerable, and the suture passing through a vessel tends to keep up the bleeding, thus interfering with primary union and favoring sepsis.

In bad cases of shock, after bleeding,

ILLINOIS SCHOOL OF ELECTRO-THERAPEUTICS.

At the request of many Physicians who could not attend the Summer Courses, has decided to give

ONE MORE SPECIAL COURSE

Beginning September 19th and continuing for two weeks. Every effort has been put forth by the management to make this last Special Course of the year an unusual success. Our Faculty of Nine of the most prominent Electro-Therapeutists of the country, will give Special Lectures on the Theory and Technique of using every known current of electricity applicable to the treatment of disease. Students will conduct all treatments in the clinics using the high frequency, high potential galvanic, faradic, static currents and X-Ray, obtaining much practical experience. Remember the date,

SEPTEMBER 19, 1904.

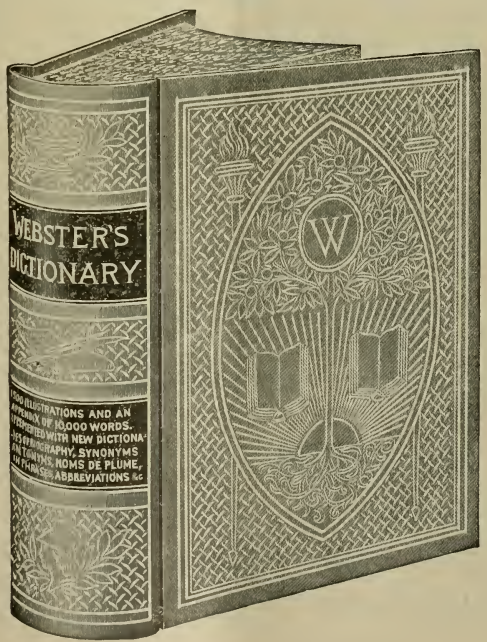
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Write for further information, terms, etc., and matriculate early to secure a good seat. If you cannot come write us regarding the fall and winter courses.

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when the circulation is weak, do not at first use saline injections under the skin, for the fluid will take a long time to be absorbed. Rectal injections are better because we get the immediate effect of the heat, and intravenous injections are better still, because the fluid enters the circulation more rapidly and the effect is more pronounced.—*International Journal of Surgery.*

Skiagraph in Diagnosing Brain Tumors.

Drs. Pfahler and Pearce, in a discussion of cerebral throbosis before the Pennsylvania Medical Society (*Penn. Med. Journal*, June, 1904) spoke of the importance of using the Roentgen rays as a means of diagnosing and locating tumors of the brain. Dr. Pfahler has examined 55 brains with the X-ray and is convinced that it is a procedure of much benefit, and that all the larger lesons, such as new growths, softenings, haemorages and abscesses can be skiagraphed.

What Do We Inherit?—It is often remarked that the children of a great genius seldom exhibit corresponding powers. Nevertheless, Prof. Karl Pearson, as the result of investigations made in England, avers that, as a general rule, ability, probity, geniality and other psychical characters are inherited from parents as truly as physical characters are. From this he draws the conclusion that although intelligence can be aided and trained by education, no schooling can create it. It is a product of breeding, and no nation which finds itself falling behind in the intellectual race can save itself merely through educational machinery; it must go back of the schools and look out for the quality of its human stock.

Strange Tribes in Africa.—Major Powell-Cotton's expedition in Eastern Equatorial Africa, just completed, has resulted in the discovery of six tribes of men previously unknown to the civilized world. One of these tribes is known to its neighbors by the name of the Magicians. The Magicians dwell on the high lands half way between Lake Rudolph and Lake Albert, and their villages consist of two-story houses built of wattle, and grouped together on the upper slopes of the hills. They inspire great awe among the dwellers in the valleys below, although the latter outnumber them a thousand to one. Their formidable reputation appears to be based upon their superior intelligence. None of the new tribes discovered by Major Powell-Cotton had ever met a white man, and they treated their visitors in a friendly manner.

Warning the Poor Against Pulmonary Cures.—A very wise plan has been adopted by the New York Tubeculosis Committee of the Charity Organization Society, in having printed and distributed among the poor of that city circulars warning against the patronizing of concerns which profess to cure consumption. Of all the brazen medical advertisements that constantly appear in the daily press of this country, this form of advertisement is the most offensive. To take money from poor people who are victims of tuberculosis is on a par with highway robbery, if not worse. The medical societies of the country could do valuable missionary work if they adopted this or some similar plan.—*Medical Age.*

The Religious Press and Medical Advertisements.—It is noted with pleasure that at least one set of religious

TRUE ANIMAL IRON

Physicians everywhere are looking for a **Blood** reconstructant that contains every element of nutrition of the animal, mineral and vegetable kingdoms, viz: **Animal Iron;** a reconstructant that will supply every deficiency in the blood of anaemic patients in adequate quantity and quality: one that will nourish—stimulate—assimilate—without tax on the digestive organs. These requirements are all found in perfection in

BOVININE

It Contains 10% Animal Iron,

20% Coagulable Albumen, and all the constituents of healthy **Blood.**

It is thoroughly sterile, requires little or no digestion, and produces blood corpuscles that **Mature.** Corpuscles of fullness and integrity. Herein lies its great superiority over any and all the preparations of inorganic iron. Your microscope will prove the truth of these facts. Our scientific treatise on Haematherapy for the asking. It contains reports of hundreds of cases.

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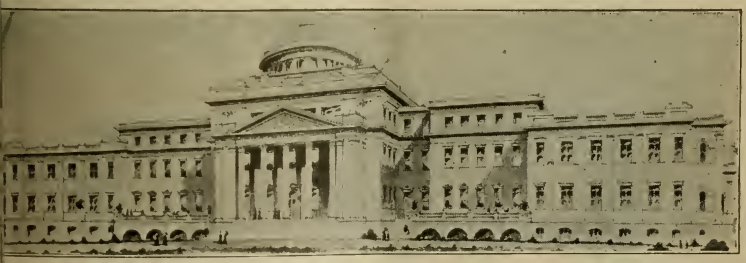
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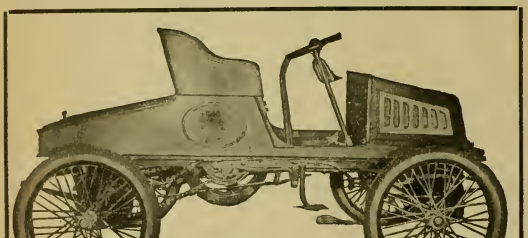
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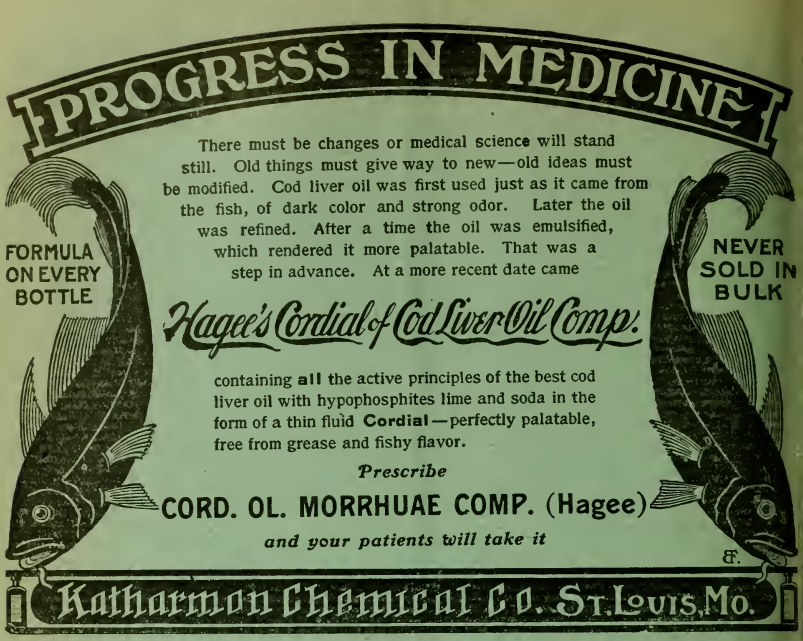
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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

"Dermoid Tumors of the Conjunctiva."

By Richard H. Johnson, M. D., Assistant Surgeon and Pathologist to the Presbyterian Eye, Ear and Throat Charity Hospital; Demonstrator of Laryngology in the University of Maryland School of Medicine, Baltimore, Md.

Dermoid tumors of the conjunctiva are essentially characterized by the presence in their structure of normal cutaneous elements, viz: hairs, hair follicles, sebaceous glands, pavement or cylindrical epithlial inshoots, blood vessels, nerves and very rarely sweat glands.

Historical.—Mauchart was the first to record a tumor with hairs on the surface of the eye-ball, (1742.) Masars de Cazeles gave the first detailed description of a dermoid of the eye, (1766.) In an article entitled, "Sur quelques hemorrhagies et notamment sur un poil qui a pris naissance dans le globe de l'oeil gauche et qu'on a ete oblige' d'arracher plusieurs fois," he described a small, white tumor on the limbus about the size of a lentil, in which there appeared at the age of puberty a stiff hair which was removed several times. Wardrop in "Essays on the morbid anatomy of the human eye," (1808) reported four cases. In one of his cases the tumor was remarkable for the length of its dozen hairs which extended between the eye-lids to the jaw. Then come observations by Demours, White Cooper and Graefe, Sr., who likened these tumors to "Mother marks" and gave them the name "Naevus pilus" or "Trichosis congenitae conjunctivae." Edwards suggested the name "Trichosis bulbi." Other authors, struck with the abundance of fatty tissue, called them "Naevus lipomatode" and "Lipoma crinosum." DeLoew, in 1850, observed two cases of "Trichiasis caronculae lachrymalis," in which hairs could be plainly seen. Ryba established order out of

chaos in 1853 by giving an intelligent description of the symptoms and advancing a theory as to the pathogenesis of the tumor. He created the word dermoid and revealed the peculiarities of the growth, the clinical history of which has been completed, thanks to numerous observations of Mackenzie, de Graefe, Taliafero, Becker, Horner, Rixet, Manz, Pagenstecker, Polaillon, de Wecker and others.

Symptoms.—Dermoid tumors are always congenial. Sometimes it happens that they are not perceived at birth, either because they are very small or because of their location under the lid. They give no trouble unless they grow or are covered with hairs, which may irritate the eye-ball. The seat of election of the growth is the external border of the cornea, but it may grow from any part of the sclera or cornea. In a case of Demours the neoplasm occupied the internal angle of the eye. The size varies from a lentil to a small olive. Picque collected (15) cases of multiple tumors, of which five (5) cases showed symmetrical lid adherences, six (6) cases symmetrical tumors, three (3) cases double tumors of the same eye, and one case of dermoid of the right eye with triple dermoid of the left eye. This last case presented a double coloboma of the right upper lid and between the double coloboma a cutaneous, appendix covered with long, white hairs. The form varies but is usually a truncated cone with long axis horizontal. The growth is slight until puberty when it often increases rapidly in size and hairs make their appearance. Sometimes the increase in size is so great that the tumor projects between the lids and prevents their proper closure. The growths as a rule contain few blood vessels, and the color is almost uniformly pale, gray or white. The surface is generally slightly granular, sometimes smooth, sometimes furrowed like the skin. Kyba and Vassaux have described cases in which the surface was papillomatous. The consistence is usually hard and fibrous, at times soft. In an observation of Van-Duyse the surface was covered with greasy secretion from the voluminous sebaceous glands in the neoplasm. Vassaux reported a similar case. The conjunctiva is normal except when irritated by hairs. Vision is not interfered with unless the growth involves the centre of the cornea. In cases of Van Duyse and Polillon, cutaneous bridges passed from the internal commissure to the cornea. Bruns has reported a case in which a cutaneous band going from the centre of one cornea united with a similar band from the opposite side. Congenital anomilies coexist often with dermoids. Picque in ninety-four (94) observations noted them twenty-seven (27) times. The most frequent is coloboma of the lids followed by microphthalmus, coloboma of the iris and choroid, encephalocele, naevi of the face, absence of external auditory meatus and cleft palate, in the order named.

Pathological Anatomy.—The tumor is made up of a regular order of the different layers of skin, viz: epidermis, dermis with papillae, hair follicles, sebaceous glands, connected with hairs or independent, and very rarely sweat glands. Sometimes hairs are wanting. Under the dermis is usually found a variable amount of fatty tissue. When the tumor is at the seat of election this tissue is scarce or wanting; it acquires more importance and predominates when the growth is remote from the cornea. It then gives the character of a dermo-lipoma or subconjunctival lipoma. All elements of epidermis are

usually present, viz: stratum corneum, stratum lucidum and stratum granulosum. In the dermis the papillae are not well developed. The capillary layer of the dermis is sometimes thickened which is caused by a considerable number of leucocytes which enter the capillaries of the papillae. In one of his observations, Vassaux found varicose vessels which were the seat of hemorrhages evident from the bloody extravasations which filled the papillae. Below the dermis, connective tissue and elastic fibres disassociate and form areolar tissue the meshes of which are filled with fat. Under this adipose tissue is the basal part of the tumor which rests on the eye-ball. The connective and elastic fibres continue directly into the scleral or corneal tissue. Nearly all dermoids contain hairs and glands. The sebaceous glands are in the dermis and sometimes pass beyond its deepest layer. They open on the level of a follicle as in the normal skin. Their volume is small as in the sebaceous glands of the lids. Sweat glands are very rare. Hyfelder, Vassaus, Reymond, Nota and Gallenga have observed them. Vassaux described a gland with a secreting portion and an excretory tube. Dermoids have few vessels and nerves. The small arteries which penetrate them are transformed into capillaries the general direction of which is parallel to the epithlial covering. In some cases the capillaries dilate at the level of the papillae and are surrounded by an abundant poliferation of young cells contributing to the rapid development of the tumor. Vassaux and Poncet have found nerve fibres. Corpuscles of Meissner and Krause have not been reported. The cutaneous bands or bridges which sometimes accompany dermoids are similar to them in structure.

Pathogenesis.—Several theories have been advanced to explain dermoids of the eye. Ryba supposes that all parts of the ectoderm which cover the cavities change into mucous membrane while those which remain exposed on the surface acquire gradually the structure of the skin. This being accepted, he supposes that the lids do not form completely so that after the fourth month there still remains a part of the conjunctiva uncovered and this conjunctiva would assume the character of skin and the gap left by the character of union of the lid would be filled by a third lid isolated on the globe. In support of his theory, Ryba notes the affinity which exists between dermoids and coloboma of the lids and cites, besides personal cases, a case by Ammon where the coloboma of the upper lid corresponded in position and direction to a congenital dermoid implanted on the superior part of the globe. De Wecker has upheld this theory. It has been abandoned for two reasons—it is not in accord with the facts—we have a better explanation. Gallenga ascribes the formation to the membrane nictitante or third lid of which the plica semilunaris is the remains in man. During foetal life this fold is sufficiently developed to cover the cornea and under the influence of pressure exercised by the lid at the beginning of the third month, there supervenes an adherence of the external layer of this membrane at the corneal border. The portion between the top of the membrane attached to the limbus and the base would atrophy afterwards in such a manner that the membrane would become normal or diminished in size. The top where it seizes the limbus would be the cause of the dermoid. On the adherence of the semilunar fold with the different parts of the globe

would depend the different seats of congenital tumors of the conjunctiva. The principal objection to this theory is that it does not explain why dermoids are nearly always in the horizontal meridian and external to the cornea. The three great theories as to the pathogenesis of dermoids are those of Van Duyse, Lannelongue and Vassaux. In order to understand them fully it is necessary to review briefly the formation of the lids. After the development of the cornea, the lids form behind in the region of the equator. There exist a superior and an inferior bud in which can be distinguished three layers, viz: a thick middle layer from which are formed the orbicularis muscle, the tarsus and the meibomian glands; an anterior layer, forming the skin; and a posterior layer, forming the mucous membrane. Between the third and fourth month the two palpebral buds, superior and inferior, meet and form a union of the lid borders by the development of their epithelium in such a way that the level of the epithelial layers of the merged lids are connected. While the lids are joined, the hairs and meibomian glands develop above and below the junction. When the hairs emerge from their follicles and sebaceous matter is being formed in the glands, the lids separate. But the lids are sometimes obstructed in their development and since the work of Dareste, we recognize the causes of congenital malformations which occur in this region. He has shown that if the amnion is arrested in its development while the foetus is growing, the former is compressed by the latter. This compression is total or partial and in the latter case causes the anomalies in this locality. He has further established the fact that adherences or bands can be produced by parts compressed between the amnion and the surface of the embryo. He would explain dermoids in the same manner as buccal fissures and auricular excrescences.

Theory of Van Duyse.—He regards dermoids as the remains of amniotic bridges or bands. The coloboma of the lids is due to an intrauterine, pathological adherence, circumscribed and temporary, between the amnion and the external tegument which covers the ocular vesicle in the embryo. The dermoid which accompanies in many cases the lid anamoly corresponds to the point where a circumscribed amniotic band remains connected with the membrane which extends before the foetal eye.

Theory of Lannelongue.—He adopts the theory of adherencees. The inclusion of the palpebral cleft is a predisposing cause in determining the localization of a dermoid. But the presence of an adherence is always the chief element. The theory of Van Duyse explains the formation of adherences—they result from a retardation in the development of the amnion.

Theory of Vassaux.—He inclines also to adherences and makes them play a special role. They arrest, says he, the palpebral buds in their descent; the two epithelial surfaces at the level of the adherence find themselves in contact with nothing to oppose them except a junction between t he lid and the ball which produces the connection between the two palpebral buds where they meet; but the mesoderm arrested at the level of the adherence and continuing to develop extends only according to the epithelial junction. It then deposits gradually cells and forms a bod which invaginates under the conjunctiva. The dermoid would be formed and made up by the free border

of the lid. This theory gives a plausible explanation to the formation of dermoids. One can understand why the tumor is a fragment of lid. We can also explain the formation of coloboma since the portion of mesoderm invaginated under the conjunctiva would cause a gap in the lid.

The case of dermoid tumor of the limbus reported last year by Dr. F. M. Chisholm and myself corresponds so nearly to the clinical history and pathological findings as described in text books and treatises that I take the liberty of repeating it in this article. The patient was a young lady of twenty (20) years, who had had a tumor at the external border of the cornea since birth. It showed no tendency to enlarge and gave no trouble but was unsightly. Vision was good. Fundus normal. The growth was about six (6) m.m. in its horizontal axis and four (4) m.m. in its vertical meridian. It encroached one (1) m.m. on the cornea, was bluish-yellow in color and smooth. No hairs could be detected with the naked eye. On removal under cocaine the growth was found to be very tough and apparently attached to the sclera. The tumor was given me for microscopical examination, and the following appearances were noted, viz: the mass of tissue measured four (4) by six (6) m.m.; it was bluish-white in color and hard in consistency; the outer surface was covered with slight depressions but a strong lens failed to show hairs. After hardening for forty-eight (48) hours in formalin and alcohol, sections were made and stained in haemotoxylon and eosin. Microscopically, the section was made up of an outer epithelial layer of squamous, polygonal and cylinderical cells from without inward. Underneath this layer were rudimentary papillae corresponding to the papillae of the skin. The main body of the tumor was composed of connective tissue containing a few blood vessels and about a dozen distinct hair follicles enclosing hairs. No sebaceous or sweat glands could be found. The tumor contained no fatty tissue as is usually the case with dermoid tumors of the limbus.

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Nephritis. *

By Robt. E. Mason, M. D., Charlotte, N. C.

In taking this disease as my subject I fear that I can present little that is new, but believing that the common maladies should not be neglected caused me to select this for my subject which I trust will be of interest to the members of this society.

Nephritides may be classed under two great divisions. Parenchymatous, which is sub-divided into acute and chronic, and Interstitial, which from the nature of the disease must of necessity be chronic only.

Causes.—Acute Parenchymatous Nephritis, most common in early life, is usually caused by the specific fevers, exposure to cold and wet, pregnancy and ingestion of certain irritant drugs.

Chronic Panenchymatous Nephritis often follows an acute attack, but is generally chronic from the beginning and is caused by over-eating, excessive meat diet, alcoholism, syphilis, chronic congestion, consequent on disease of the heart and blood vessels, and in my opinion constipation with intestinal fermentation and a deficiency of drinking water, causing an actual increase in the first instance and relative increase in the second, of the effete material excreted in the urine, are predisposing, if not exciting, causes.

Interestitial Nephritis is almost always caused by the condition causing sclerosis of other organs, such as syphilis, gouty diathesis, chronic alcoholism, middle life or old age, and heredity.

Symptoms.—All Nephritides manifest themselves in one or more of the following ways:

1st. Changes in the urine.

2nd. Systematic disturbances.

3rd. Evidences of circulatory disturbances.

In acute Panenchymatous Nephritis the main symptoms come under the head of changes in the urine and system disturbances. These symptoms are diminished or suppressed urine, which is cloudy or smoky in appearance, of high specific gravity, containing a large quantity of albumin, casts, and often some free blood.

The general symptoms are moderate fever, slow full pulse, pain and tenderness in the lumbar region, vertigo, headache, nausea, vomiting, and often oedema, which usually first appears in the eye lids. Uremia is likely to occur at any time.

In the North Carolina State Board examination, held this week, the question, "give diagnosis of the following case: Young man has been exposed to

* Paper presented at the North Carolina Medical Society, Raleigh, June, 1904.

cold, onset sudden, chilliness, some nausea and vomiting, headache, restlessness, muscular twitching, pain and tenderness in the lumber region, dyspnoea, pulse slow, hard and tense, temperature 102 degrees not constant, pallor and puffiness of eyelids and face, soon a swelling about the ankles and legs, urine scanty, smoky red color, acid, specific gravity 1025, on boiling a thick, curdy precipitate forms?" gives a most excellent picture of acute Panenchymatous Nephritis.

In chronic Parenchymatous Nephritis the symptoms come under all three heads. This disease usually begins insidiously, with little to refer to the kidneys. First there is depression of spirits, loss of energy, easily fatigued, loss of appetite, listlessness and drowsiness, or there may be the opposite phenomena, insomnia and sleep that does not refresh, anemia and loss of weight, are also early symptoms and the pallor of this disease is very characteristic. In this disease there is almost always puffiness about the face, swelling of the feet and ankles, so that after the day's work the shoes are tight; the swelling subsiding during the night. The urine is diminished in quantity, at first the specific gravity is high but as the disease progresses it falls below normal. The urine is turbid and albumin is always present and it may be larger in amount than any other disease of the kidney. On allowing the urine to stand a voluminous sediment will be seen to form which on microscopical examination will be found to contain casts of all kinds, especially the granular and the broad and waxy varieties.

As the disease progresses the dropsy increases and may be present in large amounts, sometimes involving the serous sacs. Where the dropsy is great the uremic symptoms are not so constant, although uremic symptoms may occur at any time.

Dyspnoea, aggravated by exertion and the recumbent position, is an early and distressing symptom and is caused by oedema of bronchial mucous membrane, a failing heart, chronic uremia and pleural and pericardial effusions.

The heart is usually hypertrophied and the sound of the aortic valve accentuated.

Albuminuric Retinitis, while it often occurs, is not so common as in the interstitial variety.

In chronic interstitial nephritis the principal symptoms come under the head of systemic disturbances and evidences of circulatory disturbances.

The urine is abundant and clear. The specific gravity is low, usually 1005 to 1010, and there is little albumin. The albumin is frequently so small in amount that it may not be detected and sometimes it is absent altogether in the morning urine, therefore it is especially necessary to have the sample of the total quantity passed in 24 hours. The quantity of urea is usually diminished in proportion to the amount of albumin present. Dropsy is usually absent, but there is often oedema of the face and ankles late in the disease.

Dysponea is usually present as a prominent and distressing symptom. Headache, vertigo, tinnitus autrium and palpitation give much trouble.

Albuminuric retinitis may occur at any time, this is also true of apoplexy.

The heart which is always hypertrophied and the blood vessels sclerosed, causes an accentuated aortic sound and a pulse of high tension.

Treatment.—In acute parenchymatous nephritis, as there is an acute inflammation, we should not cause a diu-

resis by drugs acting on the kidneys, therefore, squills, digitalis, etc., should not be used but we should resort to the true treatment, which is to flush out the kidneys by administering large quantities of pure water, preferably warm, at this point I will remind you that children like it best sweetened, while adults prefer acids and lemonade. The best food, drink, and drug, at any age is milk.

Instead of using stimulant diuretics the other emuctories of the body should be used to excrete the effete material, therefore hot baths should be administered. Concentrated saline purgatives may also be indicated. Baths also help to relieve the congested organs, by bringing blood from the kidneys to the skin. The bath should last from 10 to 20 minutes. The temperature should be about 100 Far., and should be given 3 or 4 times daily. After the bath roll the patient in blankets, put to bed and let sweat for an hour or more.

Pilocarpine hydrochlorate may sometimes be used with advantage. If uremia convulsions appear chloroform is indicated and to prevent a repetition give chloral in 15 to 30 grain doses, repeated if necessary. Morphia may also be guardedly used. As the poison seems to inundate the nervous system by waves, vigilance and active treatment are demanded for several days.

Dry or wet cupping, hot fomentations to the lumbar region, a light diet, largely milk, a warm temperature, confinement to the bed, later to the house, restraints from exercise and excitement, fulfil the remaining indications.

L. Stembo has had good results from ice bags applied to the lumbar region for two or three hours, the bags are then removed for one hour, then reapplied alternating in this manner until the urine is free from albumin.

The treatment of acute exacerbation of chronic parenchymatous nephritis, is practically the same as for the above disease, but there is not the same objections to diruetics. The general treatment for chronic Panenchymatous Nephritis if largely dietetic and hyegenic. A warm, dry climate, light flannel underwear and frequent bathing are indicated. A non nitrogenous diet, especially milk, should be given and the bowels kept open.

The symptoms of dropsy and dyspnoea, which appear in this disease, usually demand attention.

For the dyspnoea nothing seems to act so well as morphia in $\frac{1}{8}$ to $\frac{1}{4}$ grain doses.

We now come to the treatment of the dropsy and it is to this that I wish to call your special attention. The usual remedy, infusion of digitalis dr. 1 to 4, with potassium acetate, grains 10 to 20, every 3 or 4 hours, acts well. For quick action nitro-benzoate of caffene, in doses of 2 or 3 grains every 2 or 3 hours, can be used. Diuretin, technically known as theobromine-sodio-salicylate, is also of use. Fluid extract of apocynum cannabinum (Canadian hemp), acting as it does as a heart stimulant, very much like strophanthus and similar drugs and also causing copious diuresis and a diminution of albumin and casts, after all other drugs have failed, is not to be forgotten. In large doses it is also a copious hydrogogue cathartic. The objection I have found to this drug is, that, it being a gastric irritant, it is apt to induce vomiting, unless carefully administered.

Niemeyer's pills contain 1 grain each of powdered digitalis, squills, and calomel or blue mass, often act well. As there is need of iron, Basham's mix-

ture is usually of use.

After everything else has proven useless, I have never failed to remove the dropsy with the following combination, acting as it does prinicpally on the bowels, which in my opinion is a surer route than the kidneys:

Rx.

Antimonii et Potassi Tartras,	grs.	2
Powdered Squills	dr.	2
Potassium sulphate,		
Potassium nitrate aa.	oz.	½
Cream of tartar or compound		
Jalap powder	oz.	4

Sig. Teaspoonful night and morning.

This compound acts on all the emunctories; skin, bowels, and kidneys, and in addition is a heart stimulant.

Here I wish to call your attention to an article in a recent issue of the Journal of the American Medical Association, entitled, "Abuse of Salt as Cause of Nephritis.—Tarindo of Modena observed marked aggravation of the nephritis in two cases after treatment with saline solution for a few days. He has also observed the cases of two children who had ingested an immoderate amount of salt, followed by nephritis, the diagnosis in one case confirmed by the postmortem findings. Stokvis, Levi, Castaingn and Rathery have induced lesions of degeneration and inflammation in animals by means of sodium chlorid."

I also wish to call your attention to the experiments of Dr. F. Widal and A. Javal, both of paris. These gentlemen made nine consecutive experiments with salt on a patient suffering from chronic parenchymatous nephritis with market dropsy. I will not burden the members of this society by giving these experiments in detail but will briefly give an outline.

1. In the first experiment of 10 days, the patient was placed on an absolute milk diet of 7 pints daily. The result of this diet was a rapid diminution of both dropsy and albuminuria. The disappearance of the dropsy was principally by diuresis.

2. In the second experiment which covered a period of eight days, the patient was still kept on a milk diet with 150 grains of sodium chlorid daily. Result, marked dropsy and an attack of albuminuria.

3. The third test lasting for 11 days, was on a diet of raw meat, potatoes, sugar and butter, in this diet they gave no more salt than in their absolute milk diet. Result, Rapid diminution of dropsy and albuminuria.

4. The fourth test, which lasted for a period of 7 days, was the same as experiment 3 except with 150 grains sodium daily for the first 3 days and 225 grains per day for 4 days. Result, rapid accumulation of dropsy and increase of albuminuria.

5. The fifth experiment which lasted 4 days was on an absolute milkdiet of 7 pints daily. Result, partial loss of dropsy.

6. The sixth experiment lasting for 6 days was on the regular hospital diet, which of course contained the usual amount of sodium chlorid. Result, rapid increase of dropsy and albuminuria.

7. In the seventh test the diet was composed of raw meat, potatoes, butter, sugar and milk, with practically no salt. Result of this meat and milk diet, small in chlorides, was again a rapid diminution of the dropsy and albuminuria until the dropsy was reduced to a minimum.

8. The eighth experiment lasting four days was on a milk diet, of 7 pints a day containing 150 grains of sodium chlorid. Result, return of the dropsy to such an extent as to be alarming

and necessitating a return to a diet without sodium chlorid at the beginning of the fourth day.

9. The ninth and last experiment, covering a period of 18 days was on a diet of bread, raw meat, sugar, and butter, with practically no salt. Result, the dropsy entirely disappearing on the third day, albuminuria remaining stationary for ten days, then gradually diminishing. This diet was continued as the patient's regular diet with no return of the dropsy or albuminuria.

From these experiments these gentlemen came to the conclusion that a meat diet without salt, was no more harmful than a milk diet and that the value of a milk diet lies in the fact that it is poor in sodium chloride.

I wish to call your attention, gentlemen, to the fact that milk is also indicated because it contains about 90 per cent of water.

While these experiments seem to prove conclusively that salt is the harmful agent, still we will hold to the old theory of a non-nitrogenous diet till further experiments are made along this line and which, I trust will be done by every member of the society.

After the removal of the fluid if it should have been in pleural, pericardial, peritoneal or scrotal cavities, it seems from an article I see in a recent British Medical Journal that the injection of Adrenalin solution (1 to 1,000) will in some way not fully understood at the present time, prevent the reaccumulation. Dr. James Barr of Liverpool, after removal of fluid injected into the pleural cavity 1 dr. of adrenalin solution and, although, the patient was suffering from cancer of the pleura, no more fluid accumulated.

Ascites caused by cirrhosis of the liver, in which marked results were not expected the rapidity of the accumulation was diminished. The quantity used in this case was 2 to 3 dr. In another case of tubercular peritonitis, two treatments of four pints of sterile air and 2 dr. of adrenalin solution produced a cure. From these results it is to be hoped that adrenalin will prove useful in chronic parenchymatous nephritis with dropsy of the serous sacs.

The treatment of chronic interstitial nephritis in regard to dietetics and hygienics is much the same as for chronic parenchymatous.

As headache, dizziness, vertigo, tinnitus aurium and palpitation are usually the most distressing symptoms and as the hypertrophied heart and arterio sclerosis, which usually accompanies this disease, make apoplexy very liable to occur some drug that will dilate the blood vessels and reduce the blood pressure is indicated. Spirits of glonoin in 1 minim doses every 4 to 6 hours increasing till the desired effect is secured or potassium iodide in 5 to 10 grain doses seem to be the best drugs for this condition.

As this is the most innocous of all nephritides the patient seldom dies from this disease, but from some complication, apoplexy being the most common complication, the patient should be warned never to allow constipation or straining of any kind whatever.

Dr. Koch has recently arrived at Cairo from West Africa and is being consulted by the Egyptian Sanitary Department on the epidemic of bovine typhus which now rages in Egypt, and as to the measures being taken for its suppression. It is probable that Dr. Koch will also be consulted regarding bubonic plague.

Gelatine Treatment in Aneurism. *

By Ennion G. Williams, M D , Richmond, Va., Professor of Pathology, Medical College of Virginia; Pathologist to the Memorial Hospital, Etc.

In 1901, I made a preliminary report of a case of abdominal aneurism in a colored woman forty years of age, treated with injections of a solution of gelatine. The mass extended from the ensiform to within five centimeters of the umbilicus, and laterally, to the parasternal line on the right side and slightly beyond the parasternal line on the left side, producing a markedly visible elevation. It was rather firm and expansile. A loud bruit could be heard over it.

The patient was very emaciated and had been confined to her bed most of the time during the preceding year, and constantly for the previous six weeks. The pain was so severe that morphine had to be taken regularly every day and night.

The first injection of gelatine on September 16th, consisted of 10 c.c. of a warmed aqueous solution containing 10 per cent gelatine and 2 per cent calcium chloride. On September 29th, a similar injection was given. On October 7th, 15 c.c of a solution containing 10 per cent. gelatine only was given; October 15th, 20 c.c.; October 21st, 15 c.c., and November 4th, 20 c.c of a solution containing 5 per cent of gelatine. This made a total in seven weeks of six injections—90 c.c. of solution containing six and a half grammes of gelatine and four-tenths gramme of calcium chloride.

At the end of this seven weeks' treatment, the patient said she had not felt so well for more than a year. There was no longer the continuous pain in the back and sides. She took morphine only occasionally at night, and was so much stronger that she spent much of her time out of bed, and could walk about with comparative ease. The aneurismal mass was firmer and the bruit less distinct and of a higher pitch. The injections of gelatine solution were continued through the following eight months at intervals of about two weeks, but larger injections were given, from 20 c.c. to 60 c.c. of the solution at each injection. The patient continued to grow stronger and could walk up and down the stairs and out in the street. She never gave up the morphine entirely, but would usually take one-fourth of a grain at night. Towards the following summer, the pains increased and her strength grew less although the abdominal mass was appartnely the same. The injections did not seem to give her the same relief. In July, after two weeks of agonizing pain in the left side which morphine would not relieve, she died.

On account of my absence from the city, Dr. Greer Baughman kindly held the autopsy for me, three hours after death. The arteries were sclerotic; the abdominal cavity was filled with clots. The aneurismal mass was adherent to the liver, stomach and intestines, and partly to the diaphragm. The adhesions were so dense and the organs so massed together, that great difficulty was experienced in separating them. The dilatation extended from two inches of the iliac bifurcation to, and including, part of the thoracic aorta. The 7th, 8th and 9th dorsal vertebrae were eroded to a considerable extent. The large sac of the aneurism was anterior. Against the anterior wall of this sac, along the summit, there was a dense laminated ante-

*Read before the Richmond Academy of Medicine and Surgery, July 28, 1903.

mortem coagulum, crescent-shaped and thickest in the middle. This coagulum did not appear to be very closely adherent to the wall as there seemed to be a very narrow space (1mm.) between the wall and the clot. Microscopic examination of the clot showed it to consist of a dense mass of fibrin apparently deposited in layers at different times. Within the cavity of the aneurism was much coagulated blood, more than one would expect only three hours post mortem. This firm, dense clot lining the anterior part of the sac of the aneurism, readily accounted for the relief of pain and throbbing at first experienced by the patient, and the tumor becoming firmer and less pulsating. Posteriorly, the aneurism had eroded three vertebrae leaving not much more than the upper and lower surfaces and the intervening cartilages. The rupture was found to have taken place posteriorly. The erosion accounted for the pain never having been entirely relieved and increasing so greatly toward the close.

Another case was that of a colored man aged 55; a hard drinker, with sclerotic arteries. He had had pain in his chest for two years. There was a large, pulsating expansile mass projecting just to the right of the sternum. At about intervals of ten days, he was given three injections, 30 to 40 c.c., of a solution containing 10 per cent. gelatine. He said that several days after the injections, the pain was much less. He left the hospital intending to return, but grew worse, and a month later, died.

A post mortem was made five hours after death. No rupture was found in the aneurism. The dilation began at the aortic orifice and extended to the descending aorta. There were some clots in the aneurism, but they were all doubtless, post mortem. The 3rd, 4th and 5th ribs were eroded through, and the 2nd and 6th partially eroded. The right lung was collapsed, and the left, emphysematous. The abdominal and pleural cavities were filled with yellow fluid. The feet and legs were greatly swollen and oedematous.

I have given the injection to two other cases of suspected aneurism of the thoratic aorta, but without result except that the patients believed that the pain was temporarily relieved.

In the treatment of the first case mentioned, from two to three hours after the first few injections, the patient had a chill followed by an elevation of temperature, which, when I saw her the next morning, was 100° to 101°. This gradually subsided in twenty-four haurs. Although the quantity of gelatine was kept up, the reaction lessened until there was neither chill nor fever. The lessening of the reaction was partly coincident with the use of a purer gelatine rather than the gelatine brought in bulk for making culture media. In the second case, in which the purer gelatine was used, there was no chill and only a very slight rise in temperature. This was the result in the other two cases.

Just what effect the calcium chloride has, I have not sufficient experience to say. It was added because it has the reputation of increasing the coagulability of the blood. I thought it hindered the prompt absorption of the solution and, therefore, left it out after the first two injections.

During the treatment of the first case, I made fifty-one tests of the coagulative power of the blood ,with a modification of Wright's Coagulometer before and after the injections. I will only summarize the results. Before an injection of 50 c.c. of a 10 per cent

solution of gelatine, the blood coagulated in two and a half minutes; 30 minutes were consumed in giving the injection. Five minutes after the last injection, the blood coagulated in one and a half minutes. Twenty-four hours after another injection, the blood coagulated in one and a half minutes, having coagulated before the injection in two and a half minutes. Three days afterwards, it coagulated in one and a half minutes, and five days afterwards, in two minutes. These tests tend to show that the gelatine promptly increases the coagulative power of the blood, and that the blood retains this power at least five days.

The solution used for the injections is prepared by adding the gelatine gradually, to water just below the boiling point, and keeping the solution at a slow boil for ten minutes. It is then filtered and kept in small flasks plugged with sterile cotton. It should be sterilized in a steam sterilizer for thirty minutes, on three successive days.

The deaths so far reported in this treatment, have been due to the gelatine being contaminated with tetanus germs. Great care should, therefore, be used to thoroughly sterilize the solution. At the same time, it should be noted that excessive heating weakens the coagulative power of the gelatine. Just before administering, the solution must be thoroughly liquefied by immersing the flask in hot water. It is needless to mention the usual aseptic precautions necessary in using the antitoxin syringe.

My experience has been that there is hardly any pain if the injection is given carefully and slowly, and with the solution hardly above the temperature of the body. I have given the injections beneath the breasts, in the back and in the thighs. In the selection of the site, one can consult their convenience. I usually apply a hot water bag after the injection, to hasten the absorbtion. The patient should be kept absolutely quiet for at least five days, and then allowed to move about a little until the next injection, two to ten days later, to keep up the general health.

I believe the blood will only clot in sacular aneurisms, and the treatment is applicable only to such cases.

Lancereux, who first announced this treatment, and others who have since reported cases, have used 1 per cent. to per cent. gelatine in normal salt solution, and given 200 to 250 c.c. at one injection. I prefer to use a 5 per cent. to 10 per cent. solution, and to give about 50 c.c. at one injection instead of 200 c.c. of a 1 per cent. to 2 per cent. gelatine in normal salt solution, because the larger the quantity of solution injected hypodermically, the greater is the circulation stimulated. If the same amount of gelatine can be injected with a smaller quantity of solution, the greater will be the tendency of the blood to clot.

In conclusion, the treatment is one that should be given a thorough trial. So far it seems to be harmless if the solution is properly sterilized. It is practically painless if given with due care. The gelatine undoubtedly increases the coagulative power of the blood. In the treatment of aneurism, it is probably of value only in cases of the saccular type. It is doubtless of great value in many cases of hemorrhage and other conditions where a prompt increase in the coagulative power of the blood is desired.

315 Grace Street, east.

Injuries of the Brain and Cord.

By Parks M. King, M. D.

While an interne in Harlem Hospital New York City, it was my privilege to see and study a large number of cases of injury to the brain and cord As I have neither the history nor the clinical notes of any of the cases I shall attempt to relate from memory the history of a few of the cases as particularly interested me at the time. The only inference I wish to be drawn from the cases is the importance of obtaining a complete history of the case, of a thorough examination of the patient and of the difficulties in making an exact diagnosis in brain conditions.

S. H., male, 12 years old, Russian Jew, while playing on the icy pavement Jan. 1903, slipped and fell, receiving a small scalp wound two inches above right eye. He ran home and the next morning his mother sent him to a dispensary to be dressed. He returned to the dispensary several times for redressing, his wound having become infected. He complained of some headache but continued going to school. Three weeks later while responding to an ambulance call I saw him for the first time. The mother told me that the boy was standing by the kitchen stove when he complained of feeling dizzy and suddenly fell, being seized with a general convulsion, becoming "black in the face" and that he lost consciousness. When I arrived the boy was conscious but still in a dazed condition. The scalp wound while nearly healed nearly healed was still discharging some pus. Further examination revealed a slight depression just beneath the site of the scalp wound. A tentative diagnosis of compound depressed fracture of the vault was made and patient removed to the Hospital. He soon regained complete consciousness and used his voice as only members of his race can do. The mother who followed the child to the hospital joined in on the chorus and the home surgeon allowed her to take the child home, having diagnosed the depression as a natural one and the convulsion as due to an epileptic seizure. Three or four days later the child was again brought to the hospital having had another convulsion. This time it was decided to operate and an incision was made over the site of the scalp wound and the bone exposed. A small depressed fracture was seen to exist. The skull was trephined and the depressed bone elevated; as the dura was seen to be bulging it was incised and about .two ounces of creamy pus escaped from an abscess of the frontal lobe. After the first two of three days the temperature became normal and the patient was perfectly rational but very restless. This condition continued for some weeks, the abscess cavity gradually closing up. About this time patient became very obstreperous, refusing nourishment and medication, he would use obscene language, would bite and spit at the nurses, and at times he would sing and cry out at the top of his voice for hours. He finally became very stupid and his temperature began to fluctuate between 106 and normal. The incision in his dura was opened but no pus found. He remained in this condition until some time in May when he was carried home by his parents unimproved.

In this case to review, a boy fell and received a compound fracture of the skull. He was attended by a dispensary surgeon who failed to recognize the condition. For three weeks the

Read before the Charlotte Medical Society.

boy suffered no inconvenience. The patient was brought to the hospital with a diagnosis of fractured skull but when he recovered from the effects of the convulsion in so short a time the diagnosis of epilepsy was made. The ambulance surgeon who brought the boy to the hospital the second time (he had not seen the case before) made a diagnosis of epilepsy. It was not until the dura was exposed that we thought of pus and when we incised the dura we found the entire right frontal lobe was an abscess cavity, and this without any elevation of temperature or other symptoms except the convulsions. The subsequent history is also instructive.

Case II. I was called one afternoon to see a young boy, 20 years of age, who had fallen on the street with a convulsion. He had partially regained consciousness when I arrived. I was told by friends that he had had a "fit" two weeks previously and had been carried to Harlem Hospital where he remained for only two hours when he was able to walk home. The patient was again taken to the hospital with a diagnosis of epilepsy. The next morning he complained of very severe occipital headache, he said he felt dizzy; temperature was normal. The patient was found to have an otitis media of the left ear of one month's duration. He was gotten up out of bed and on his attempting to walk it was found that there was marked incordination. A diagnosis of cerebella abscess was made, and an incision was made at the usual site behind left ear and although the brain was thoroughly explored no pus could be found. Two days later at autopsy I discovered an abscess in the right lobe of the cerebellum about the size of a walnut.

The points that I wish to call attention to in this case are that the patient was brought to the hospital twice with the diagnosis of epilepsy, the first time being able to walk home in two hours and having no return of the cerebella symptoms until the second convulsion when the headache and incordination came on; and that the abscess should be on the opposite side from the ototis media.

Case III. An Italian, 50 years of age, while in an intoxicated condition, fell down a flight of stairs and received a small contused wound over the left parietal region. He was carried to his room and remained in bed three or four days without medical attention, afterwards going about his usual business. Three weeks later he went to bed intoxicated, the next morning his wife was unable to arouse him but thought he was simply "sleeping off his umbrae" or drunk. Later in the day being still unable to arouse him, she became alarmed and sent for an ambulance. I found the patient in a semi-conscious condition. There was no paralysis and he would move his limbs and stick out his tongue at command, pupils were equal, pulse slow and full. He was unable to speak but showed that he understood when spoken to. The contusion of his scalp was still oedematous. I was unable to determine positively whether a slight depression existed or not. I removed the patient to the hospital with a diagnosis of fracture of the skull with pressure on Broca's convulution (speech centre). While in the hospital his coma gradually increased until he became completely unconscious, apparently there was no paralysis. He was operated on the third day after he came to the hospital, the incision being over the contusion. No sign of a fracture being found the skill was trephined.

When the dura was incised several ounces of cedbro-spinal fluid escaped and a diagnosis of acute hydrocephalus was made. The brain tissue was seen to be slightly congested. The patient lived for several days, never regaining consciousness. On autopsy I found a fracture of the skull extending from squamous portion of the left temporal bone across the base of the skull, through the squamous portion of the right temporal to the right parintal bone. The seperation between the basler portion of the occipital and the sphenoid was such that I could easily insert my finger into the fissure. There was an extra dural blood clot on the right side involving the entire tempo-sphenoidal lobe, almost the entire occipital and the inferior surface of the frontal.

This case illustrates the difficulty in making an exact diagnosis. The original diagnosis of fracture with pressure symptoms was correct but we were entirely wrong as to their location. The fact that the hemorrhage was not over either motor-sensory area accounts for the absence of paralysis. If the man was left-handed the pressure on the inferior surface of the right temporal lobe would account for the aphasia. I was unable to obtain any history of injury other than the fall down the flight of stairs.

Case IV. While responding to an ambulance call one night I was stopped by a policeman who asked me to stop on my way back to the hospital and see a woman who had fallen down a flight of stairs. On my return a few minutes later I was told that it would be unnecessary to see the patient as she was uninjured. The next evening I received another call to attend the same patient. She told me that she had little or no pain, but complained of a numbness in her arms and legs, that when she attempted to move her limbs that "electricity" would dart up and down them. She could move all of her limbs freely and was able to dress herself. As I remember the case there were no bruises on her body. She gave the history of having struck her head when she fell the night before and she complained of the soreness and stiffness in the back of her neck. The patient was taken to the hospital with a diagnosis of possible fracture to some of the cervicial vertibrae. She lived about 48 hours after reaching the hospital. The darting pains rapidly gave way to loss of motion and finally complete paralysis of the extremities. Her respiration became involved a short time before death. Autopsy revealed a fracture of the bodies of the fourth and fifth cervical vertibrae without displacement. The hemorrhage into the canal was slight. The cord was swollen and deeply injected, giving evicence of acute traumatic myelitis.

Some Notes on the Symptoms and Diagnosis of Cholelithiasis.

By Stuart McGuire, M. D., Richmond, Va., Professor of Surgery, University College of Medicine, Physician to St. Luke's Home, Etc.

The interest of abdominal surgeons first centered in the uterus, ovaries and fallopian tubes; later the appendix has been the organ to be most largely studied and discussed. At present the gallbladder and ducts are the objects of greatest interest. Gallstones have been recognized and treated for many centuries, but until Marion Sims did the first premeditated operation for the removal of a biliary concretion some tweney-six years ago, the disease was considered

*Read before the Richmond Academy of Medicine and Surgery, Nov. 24, 1903.

a medical one and not amenable to surgery. The belief that gallstones could be relieved by diet, exercise, mineral waters and drugs had been so long entertained that even to this day the laity, and many of the profession, thought surgery should only be resorted to when continued jaundice or profound sepsis threatened the patient's life. By the earnest efforts of many teachers this fallacy is being corrected and the truth of the fact appreciated that surgical intervention should be practiced in every case where gallstones give decided symptoms; for early surgery on the biliary tract, like early operations for appendicitis, is safe and easy, while late surgery is difficult and desperate.

Attention is called to the frequency of gallstones. Postmortems on a large number of bodies show that they exist in from three to ten per cent. of all cases. The reasons diagnosis is not oftener made is because many stones are quiescent and give rise to no symptoms, and because symptoms which often originate from gallstones are misinterpreted and attributed to gastritis, intestinal indigestion, chronic appendicitis, loose kidney and other troubles.

Regarding the cause of the formation of gallstones, there are two theories; one that there is a chemical change in the bile which causes precipitation of its solid constituents; the second, that infection of the gallbladder with the colon bacillus, or the germ of typhoid fever, gives rise to cholecystitis and the secondary formation of stone. Gallstones are usually found at or after middle life; are three times more common in women than in men; are most often observed in those who lead sedentary lives ,wear tight clothing and eat to excess.

The symptoms of gallstone depend largely on its location. If the calculus is in the gallbladder or cystic duct, the symptoms are local and consist of spasmodic pain colicky in character, attended by tenderness in the epigastrium and frequently distension of the gallbladder sufficient to make it perceptible on palpation. If the stone, however, is lodged in the hepatic or common duct, in addition to the foregoing local symptoms there will be constitutional symptoms due to the absorption of bile in the blood. The symptoms in detail are: 1. Pain, due to spasmodic contraction of the gallbladder in the efforts to force its contents through the ducts obstructed whether by impaction of a stone or the turgescence of their mucous lining. This pain is colicky in character, located over the gallbladder and distributed either in the direction of the right shoulder, umbilicus or other portions of the abdomen. The pain varies in duration sometimes lasting only a few minutes, sometimes continuing with only slight intermission for weeks. 2. Tenderness and rigidity, due to localized peritonitis, pressure over the gallbladder giving intense sickening pain, while pressure over the right shoulder, umbilicus or region to which the pain is referred is unattended by pain. 3. Collapse, vomiting and fever, coming on in severe cases in the order mentioned and being due to reflex irritation or septic infection, the fever sometimes running high from the start, but occasionally being of a low type and simulating that due to typhoid. 4. Distension of the gallbladder caused by obstruction to outflow and accumulation of mucus or hepatic secretion. In some cases the bladder reaches an enormous size and has been mistaken for a loose kidney or ovarian cyst. In other cases the bladder becomes much thickened and contracted. 5. Enlargement of the liver, sometimes

due to distension of the capillaries with bile and sometimes due to hepatitis either of acute or chronic type. 6. Jaundice, due to the absorption of bile in the blood, characterized by a yellow discoloration of the skin and eyes, and attended by coffee-colored urine and clay colored stools. As a frequent associate there is intense itching of the skin. Jaundice, while formerly considered pathognomonic of gallstones, is by no means a constant symptom, and is frequently a result of other diseases. In last year's work at St. Luke's Hospital, there were twelve cases of gallstone and only four of them were jaundiced. During the same period there were eight cases of jaundice and only four due to gallstone, the remainder being the result of cancer. Differentiation between the jaundice of gallstone and of cancer is sometimes impossible except by an exploratory incision, the general rule laid down by authorities being that intermittent jaundice is caused by gallstones, while persistent jaundice is usually due to malignant disease.

As a result of gallstone there is frequently cholecystitis, empyema of the gallbladder, gangrene of the gallbladder and cholemic or bile poison, which frequently terminates in acute nephritis.

This importance of diagnosing gallstone cannot be overstated. The mortality of operations in the early stage is only one per cent., while in advanced cases it is at least fifty per cent. If the possibility of cholelithiasis were constantly borne in mind, there would be fewer cases treated ineffectually for gastritis and indigestion, and more cases operated on and cured for gallstone. I remember seeing, when a boy, a surgeon exhibit an unusually large number of vesical calculi to a number of doctors, and, when asked how he found so many stones to operate on, hearing his terse reply, "I looked for them." This will be the case with gallstones if the possibility of their presence is constantly borne in mind. Looking for them will not give them to the patient, but finding them will bring relief through an appropriate operation. Difficulty in making a diagnosis in the case of gallstones is due to the fact that one or more of the so-called cardinal symptoms are frequently absent. In any given case, the first thing to do is to get a complete history and a careful description of all symptoms. If at any time there have been gallstones in the feces or vomitus, especially if the calculi have been facettted, the diagnosis may be made absolutely. The passage of one gallstone almost invariably indicates the existence of others in the bladder. The deep prod or poke in the epigastrim with the clenched fist is spoken of by some authories, as of value, causing in the case of gallstone a sickening sensation. Inspection, palpation, percussion and auscultation, all afford evidence of value. Examination of the blood is sometimes of interest as the occurrence of marked leucocytosis would indicate suppuration. Examination of the urine should always be made as in some cases a trace of bile will be detected when the amount in the blood is insufficient to cause appreciable jaundice. The X-ray in my experience has been practically of no value. Gallstones are composed largely of cholesterin, and are so transparent that they do not cast a distinct shadow on either the fluoroscope or the photographic plate.

The City Council of Cleveland, Ohio, on May 31 passed an ordinance making it a misdemeanor to use, give away, or sell a toy pistol or blank cartridge in that city on the Fourth of July.

SELECTED PAPERS.

Mouth Breathing.

By M. F. Coomes, A. M., M.D.,LL. D., Prof. of Physiology, Ophthalmology, Otology and Laryngology in the Kentucky School of Medicine; a Member of the American Medical Association, the Kentucky State Medical Society, and the Louisville Clinical Society; Ophthalmic Surgeon to the Louisville City Hospital and the Kentucky School of Medicine Hospital; Consulting Ophthalmic Surgeon to Sts. Mary and Elizabeth Hospital; Ophthalmic Surgeon to St. Anthony's Hospital, Etc.

No more important question can be considered than that the nose is intended to be the chief avenue through which air should be admitted to the lungs. The mouth should be used for respiratory purposes only in emergency.

The North American Indians, as a rule, observe the necessity of keeping their mouths shut, and to that end certain of the tribes take every precaution to keep the mouths of their infants closed.

Dr. Catlin, a distinguished surgeon of the United States army, made a special study of the habits of these children of the forest, and he was so much impressed with their habit of keeping their mouths shut and upon their insisting upon their children doing the same thing, that he published a litttle monograph some years ago, the title of which was, "Shut Your Mouth." This book detailed the facts in particular concerning the customs of the North American Indians in regard to keeping their mouths shut.

The civilized mothers can well afford to imitate their sisters of the forest in making their children keep their mouths shut, and if it be impossible for the child to do so they should investigate the causes of mouth breathing and have them removed.

Nothing is more unsightly than an open mouth in an adult, and nothing is more unsanitary in any person than to keep the mouth constantly open. It affords a ready avenue for the ingress of dirt, dust and germs of every description and kind; and since it is a well known fact that the germs of tuberculosis are air borne, it makes it doubly necessary that we should inhale through the nostrils, thereby reducing the danger of taking up the infectious germs to a minimum, as they would be much more liable to perish before reaching the lung by passing through the nose than by passing through the mouth.

Again, it is a fact that children are much more liable to contract diphtheria than adults, and I believe that the reason for this is that children, as a rule, keep open mouths, and take up these germs when adults would not be liable to the same danger by keeping their mouths closed.

As a means for preventing wrinkles in the face it is certain that the practice of keeping the mouth shut is one of the most positive. An open mouth results in wrinkles at the corners of the mouth and a general wrinkling about the lower portion of the face which is wholly unnatural, and to this end, if you would avoid a wrinkled face, keep your mouth shut except when talking or eating.

Mouth breathing is very largely a habit for which somebody is to blame.

If it be an adult, the individual is to blame; if it be a child, the mother and father or others that have special super-

vision over the child is to blame; it being understood in all of these cases that there is no obstruction in the nose and that nasal respiration is possible and without discomfort, and that the mouth breathing is simply a habit which has resulted from carelessness or ignorance as to the importance of nose breathing. In the cases where nasal respiration is impossible then mouth breathing is a necessity, and investigation of the nose and pharynx is demanded, and if obstructions are found they should be removed sufficiently to enable the patient to breathe through the nose comfortably. One of the most common nasal obstructions is the relaxation of the membrane covering the turbinated bodies. You also frequently find this membrane in a hypertrophic condition, but in a great majority of nasal obstructions it will be found due to simple relaxation of the membrane covering the inferior turbinated bones. This relaxation is not found persistent day in and day out, but is more persistently so in the night than in the day. At night the recumbent position, with the influences of gravity, makes this membrane much more liable to become relaxed and engorged, when the tissues become erected as the result of position, or the change of atmosphere. The nasal breathing is always more difficult in a close, warm room than with a moderate temperature.

Where there is a genuine hypertrophy, the tissue refusing to shrink up to any great degree under the influence of adrenalin, then it will be necessary to remove a sufficient amount of the tissue to give good breathing space. Where there is simple relaxation and the tissues blanch out readily under the influence of adrenalin, then superficial cauterization with the electric wire will be sufficient to contract the tissues enough to give good breathing space. The deep burning is unnesessary and painful, and produces ciatrical tissue which often leads to very great discomfort, because the secreting surface has been destroyed, and inspissated mucus and other debris will accumulate on the scar surface, and in that way make it unpleasant to the patient and sometimes produces ozena. The patient should be kept under observation for quite awhile, and if the shrinkage is not sufficient after ten days or two weeks the burning may be repeated again, and even three or four times if necessary, at intervals of ten days or two weeks. Where you have such obstructions as spurs of bone, deviated septums and polyps, these things should be removed.

Last, and by no means least, comes the obstruction due to adenoid vegetations or growths in the nasal-pharyns. Aside from the eruptive diseases nothing is a more fruitful source of inflammations of the eutaschian tube and middle ear than adenoids in the pharyns.

Dr. Braden Kyle, in his excellent work just published, says in at least 90 per cent. of cases of adenoid vegetation there is involvement of the eustachian tube, with deafness in a varying degree.

The writer's experience, and that of almost every other critical observer, can bear testimony to the truthfulness of the statement made by Dr. Kyle concerning the presence of adenoids in the pharnyx. In addition to the involvment of the ear the defective respiration, that is, mouth breathing, is accountable for many of the ailments of childhood. The imperfect condition in which the air enters the lungs makes them ill thriven, and they become round shouldered and dwarfish in their general make up, and are usually bad

sleepers, and are anemic and unable to stand the ordinary amount of fatigue that children in moderate or in good health should bear. As before stated, I think there can be no doubt but what this mouth breathing is accountable for many children being tuberculous, because, with their open mouths and their low stature, they are in an atmosphere more liable to contain the germs of tuberculosis than the adult, whose breathing apparatus is two and one-half to three feet above that of the ordinary child

Nearly all of the cases of co-called nasal catarrh met with in the child and those of adults are nothing more nor less than cases of obstructed post nasal spaces. With this understanding of the pathological condition, the method of treating all of these cases is very readily understood. The thing to do is to free the post nasal spaces from adenoids or any other obstructions that may exist.

If the obstruction is due to the presence of adenoids this is readily done by curettage, which is not painful, and which may be done under ordinary anesthesia produced by cocaine. Just here I wish to enter my earnest protest against the use of a general anesthesia of any kind in the removal of adenoids from the post nasal space from children or adults. First, and most important, the operation is not painful if the parts are put under the influence of cocaine. Second, there is a great deal of time saved by the non-use of a general anesthesia. Lastly, but not least, the general anesthesia has its dangers and is troublesome, and sometimes very ugly results follow its use, and the operation is not of sufficient gravity to demand this course, and for that reason I do not feel that we are warranted in giving a general anesthesic for the purpose of removing adenoids.

Of course, children will make a great fuss under any circumstances, and I invariably say to the parent or those interested in the child that they will make a fuss anyway. During my whole professional career I have never given a general anesthetic for removing adenoids from the pharynx of a child or any person. After the curetting has been performed it is well to spray the nose out four or five times a day with normal saline solution, containing from five to fifteen drops of carbolic acid to the ounce. The child may also use a gargle of the same material or any other antiseptic solution that is convenient.

In a few days the child has fully recovered from the effects of the curettage, and in a short time will breathe through its nose if that organ be in condition, and in nearly every instance there will be a great improvement in the general health after curetting the pharynx. It is also well to give them an iron tonic of some kind or other so as to start them on the up grade, and if they are much debilitated an emulsion of cod liver oil will often prove very beneficial to them. It is a rare thing that any of those children will need the attention of a specialist for more than a week. I frequently curett them and send them back to their homes in the country, and never see them again. I have almost invariably had excellent results to follow this plan.

If other forms of obstruction exist in the nose or pharnyx, they should be removed so as to make nasal respiration possible.—*Am. Prac. and News.*

The May mortality of Chicago was the lowest on record, the death-rate being only 13.44 per 1,000.

Chorea and Anemia.

By Roshier W. Miller, M. D., Ph.G., Barton Heights, Va., Lecturer on Nervous and Mental Diseases, and Professor of Theory and Practice of Pharmacy, University College of Medicine, Richmond, Va.

In the etiology of chorea, nothing is noted relative to anemia. It is simply accounted as an accompanying symptom of the condition. Medical literature emphasizes the relation between rheumatism and chorea, with anemia as an important symptom. After observation of several cases, I am strongly of opinion, however, that anemia as a causative is worthy of investigation.

Anemia of toxic origin presents pathological conditions which favor the production of choreaic affections. It is true that simple anemia is, as a rule, of secondary origin, and, viewed in this light, it may be argued that if chorea arises, it is the result of the primary and not of the secondary conditions—thus agreeing with the admitted etiology. This argument, however, will not satisfactorily explain those cases of chorea which arise remotely from the primary condition, but recently from the secondary effects.

I submit three cases in which symptoms, treatment and recovery seem to intimate at least a possible relation between anemia and chorea.

Case I.—A female child of eight years gave a history of typhoid fever eight months prior to my visit. According to the mother's statement, the child had made a quick and good recovery, gaining rapidly in weight and exhibiting the energy of her former life. Six months later she became irritable and pale, with pain in her arms and legs, which condition was soon followed by gastric disorders and irregular spasms of the muscles of the face. Simple anemia was in evidence from objective and subjective symptoms alone, but was unquestioned in the light of the results obtained from blood examination—the red blood element being present to the extent of barely 3,000,000 red corpuscles per c. m.

This case was treated with two teaspoonfuls of pepto-mangan (Gude) and two drops of Fowler's solution, three times a day. After gastric symptoms had abated somewhat, two raw eggs per day were added to the diet. The patient was discharged in five weeks, completely recovered.

Case II.—A female child of ten years of age; gave history of malaria (a well-defined case of intermittent fever) one year previously. The pallid condition of the child induced the mother to solicit my aid. Upon examination, I found choreaic movements which had escaped the mother's eye, though she did admit that the child "could not sit still very long at a time," and "was constantly working her fingers." The blood examination revealed no plasmodium. The red cells were reduced to 2,800,000 per c. m., with a proportionate decrease of hemoglobin.

Pepto-mangan (Gude) alone was employed in doses of two drams in a glass of milk three times a day. The blood examination four weeks later showed red cells present to the amount of 3,900,000 per c. m., at which time I dismissed the case completely recovered.

Case III.—A female child of thirteen years. Two months before my visit, the mother informed me, the child became peevish and pale, and was reproved at school for her inability to write neatly. She was taken from school, but she grew rapidly worse. Morning nausea, vomiting, headache, and anorexia were her daily compan-

ions. I found her with pronounced histrionic spasm with involvement of the upper and lower extremities. Anemic murmurs were plainly apparent, but no endocardial irritation could be determined. The blood count showed reduction in red cells to 2,100,000 per c. m. The hemoglobin was reduced to a degree greater than the red cells. A curious feature of the case was the morning nausea. Immediately upon awakening, she experienced nausea, which was followed by vomiting. I discovered, however, that this condition was superinduced by odors from the kitchen, and directed that a small sponge, moistened with creosote water be placed over the nose and mouth before the preparation for breakfast began. The annoying symptom was promptly checked by this simple method. The anemia in this case may have been produced by malnutrition, but even this view is mere speculation.

The irritability of the stomach in this case was so pronounced that I did not deem it wise to give nourishment—not to speak of medicine—by the stomach. During the first four days rectal alimentation was employed. A nutritive enema, consisting of four ounces of peptonized milk and two drams of pepto-mangan (Gude), was given every six hours. Small amounts of peptonoids with creosote on ice were given by the stomach. Egg albumin was taken in all the water she drank. After four days, the stomach was tested with small amounts of milk and pepto-mangan (Gude). Beginning with four ounces of milk and one dram of pepto-mangan (Gude) every four hours, the amounts of each were rapidly increased, until after three days the patient was taking eight ounces of milk every two hours and four drams of pepto-mangan (Gude) three times a day. This diet, plus three raw eggs a day, together with the above treatment, was all that was employed for six weeks. The blood examination at this time showed a highly gratifying condition—the red cells being present to the extent of 4,100,000 per c. m. The bloom of youth once more tinted the cheek, and the shrine of St. Vitas lost a visitor.—*Va. Med. Semi-Monthly.*

ABSTRACTS.

Myelopathic Albumosuria.

(Kahler's Disease; Multiple Myeloma).

(*Medical Record.*)

S. J. Meltzer reports a case of this rare disease which occurred in his private practice. Not more than 30 to 35 cases have been reported, although it is likely that it occurs much more frequently, being compounded with nephritis and rheumatism

The disease consists in a more or less diffuse neoplasm, sarcomatous in character, appearing simultaneously in several bones of the trunk without forming any metastases. The tumor consists of round cells which do not differ greatly from the normal cells of the bone-narrow. It replaces the bony structure in the cavity of the bone, erodes also the vortex, causes sometimes external swellings of the bone, and also spontaneous fractures.

The essential clinical points of the disease are: pain of the bones, especially those of the trunk, the presence of Bence Jones' albumose in the urine, and a more or less rapid decline leading invariably to a fatal termination. The

occurrence of the albumose in the urine is pathognomonic for this disease.

The writer's case and a majority of the other reported cases were discovered while testing the urine for albumin. Addition of nitric acid to the urine will cause a very bulky precipitate, which—unlike albumin—will redissolve on being heated to the boiling temperature and reprecipitate on cooling. There is no remedy known at the present time.

The Use of Rubber Tissue and Boracic Acid in the Treatment of Surface Granulating Wounds and Especially of the Varicose Ulcers of the Leg.

(*Medical Record.*)

Schley states that for the last year they have used rubber tissue in the outdoor department of St. Luke's Hospital with remarkable success on granulating wounds. His method is as follows:

Upon these freely granulating surfaces well-powdered boracic acid is abundantly sprinkled. This is covered smoothly with rubber tissue, overlapping the edges of the ulcer by an inch or two and held in place by adhesive plaster strapping. Absorbent gauze covers the tissue, again overlapping its edges, and a snug supporting bandage completes the dressing.

A point of much importance is the length of time such dressings should be left undisturbed. They are rarely changed oftener than once in five days, usually once a week, and occasionally the interval is longer. He has been impressed with the really rapid rate of epithelial growth if given a chance. The irregular surface or mesh of the gauze "crocks" the surface, producing hills and dales over which epithelium has to climb. The smooth surface of the tissue insures a smooth surface to the granulations. The boric acid acts as an efficient antiseptic astringent, diminishing and sweetening the discharges and preventing excessive transudation and exuberant granulation, which two factors undoubtedly act as the greatest checks to epithelial growth and covering. These factors, undoubtedly long appreciated, have led to the use of drying powders and various expedients to reduce excessive granulation, but, while doing so to a certain degree, form a crust under which exudation continues as before. It remains to combine the mild antiseptic astringent with a smooth impervious surface to secure the best results.

The Etiology of Acute Rheumatism.

The *Medical Journal* in an editorial gives the conclusions reached by Beattie in an article on this subject in the *Journal Pathology and Bacteriology.*

Beattie concludes that in the light of all the work done, it is impossible to resist the conviction that acute rheumatism, and its asociate chorea, is a bacterial disease. The only question is whether the microorganism is a specific one. The fact that in most cases of rheumatism organisms are not found is only what might be expected, as the disease is rarely fatal in the acute stage. Moreover, the diplococcus is very minute and might very easily be overlooked, and besides it seems to be very easily destroyed in the tissues. The presence of streptococci, pneumococci, and other organisms does not signify until they shall have been proven capable of transmitting the disease. They are liable to be deposited on any damaged area. Up to the present time only

two organisms have been shown experimentally to produce acute rheumatism, namely, Achalme's bacillus, and the diplococcus described by several observers? It is highly improbable that later observers with their attention focussed on the point by previous work, could have overlooked the former of these organisms, while, on the other hand, it is quite possible that the first observers might have overlooked the diplococcus. At present, therefore, the weight of evidence is in favor of the diplococcus as the causal agent.

The Stumps in Appendectomy.

(*Pac. Med. Jour.*)

Anderson reviews the different methods of treating the stumps. He gives his own method as follows:

As soon as the appendix is "delivered" or brought out of the abdominal cavity with or without a portion of the caput coli, and freed from adhesions, should there be any, I apply an angiotribe (the blades of which measure one centimeter in width) to the appendix *close* up to and *flush* with the colon. The angiotribe compresses the appendiceal tissues so firmly that only the peritoneal tissue remains. By means of an intestinal or cambric needle, threaded with No. "o" catgut, a "purse string" ligature is applied in the walls of the colon one centimeter from the base of the appendix. The next step consists in the introduction of a ligature of the same material through the mesenteriolum midway between the appendix and its free margin. The abdominal wound is now carefully packed with sterile *moist* gauze to protect the peritoneal cavity from the slightest possible infection. The angiotribe is removed and the ligature tied around the appendix, flush with the bowel where the angiotribe has crushed the tissues. When practicable, as it usually is, the same ligature is retied about and made to include the mesoappendix. Should the latter be too large or contain too much adipose tissue several small ligatures are applied to it. Forceps are now applied to the distal end of the appendix and mesoappendix and mesenteriolum are amputated between the ligatures and forceps. The ligatures control all the bleeding and oozing and the 10 milimeters of appendical stump consist of nothing but peritoneal tissue, the mucosa and muscularis having been crushed. Pure carbolic acid is applied to the stump; this is followed with pure peroxide. The whole is washed with sterile hot normal salt solution and then carefully dried. An assistant now depresses the stump into the caput coli and the "purse string" ligature is tied, thus completely invaginating the ligatured stump. By placing the "purse string" ligatures about one centimeter from the base of the appendix, and by leaving the stump only about 10 milimeters long, the serous surfaces of the invaginated colon and appendical stump come in actual contact and rapidly adhere, forming a solid base, which has never, in my hands, left any depression or infundibulum for future trouble.

A Contribution to the Study of the Operative Cure of Gastric Ulcer, With Report of a Case.

(*International Journal of Surgery.*)

Strobell reports a case of gastric ulcer occurring in a nurse. The patient was operated on and made an uneventful recovery. At the end of six months patient suffered pain from post-operative adhesions. . These were entirely relieved by eight applications of the X-rays.

His conclusions from this study of

gastric ulcer in one of its simpler forms are, that the *purely medical treatment* of all forms of this disease should be persisted in until hematemesis occurs, which is in fifty per cent. of all cases, or until progressive disturbances of nutrition result in emaciation and exhaustion, when it becomes strictly operative. (Perforative cases are, of course, always operative).

Upon the occurrence of hemorrhage, at any stage of the case and in any degree, the proper treatment is surgical and delay is useless, if not dangerous, as we cannot tell how serious the condition is. We can only guess, and guessing is not science. There may be a threatened perforation or erosion of the wall of a large arterial twig, etc., and we have no means of knowing it.

It is this same uncertainty that hangs about appendical and gall-bladder disease that makes it safest to operate early. And not alone for this reason, but because the patient wants rest from suffering, which in the event of such a complication only seems the more hopelessly remote.—*International Jour. of Surgery.*

Calculus in the Ductus Communis Choledicus.

The rapid progress in the study of these troubles in the last fifteen years has been due to the work and influence of Lawson Tate, Naunyn, Reidel, Kehr, Roberson, Finger and Senn, says Byron Robinson (*Am. Jour. Surg. and Gyn.*, July, 1904). Its frequency is estimated at from 4 to 39 percent.

Calculus in the duct gives rise to pathologic conditions—(a) trauma to the mucosa; (b) congestion; (c) exudation; (d) nourishing media for bacteria; (e) interrupted flow of bile.

Operation for removal of biliary calculus may be the simplest form of abdominal surgery or it may tax to the limit the most experienced abdominal surgeon. The best method to pursue for the removal of calculus from the ductus choledochus is to make an incision from the 10th costal cartilage distalward for 5 inches along the right border of the right rectus abdominalis. If further incision be required to enlarge the wound it can be executed by a medianward incision at the proximal end and a lateralward incision at the distal end.

The dimensions of this incision enables the liver to be partially drawn through the wound, delivered and reflected proximalward over the costal arch. This important maneuver exposes the extra-hepatic biliary ducts to direct view and manipulation. Every inch of the ductus choledochus,, ductus hepaticus, ductus cysticus and cholecyst can be palpated and viewed except perhaps the intra-parietal duodenal segment of the choledochus: however, this portion can be precisely palpated. The choledochus is palpated by placing the index finger in the foramen of Winslow and the thumb on the choledochus. Precautions must be exercised that the liver be not dragged excessively for it will produce profound shock from trauma to the hepatic nerve-plexus and abdominal brain: the solar ganglion.

After exposure of the biliary ducts to direct palpation and view the required incisions may be executed in some convenient point to remove the calculus, and the ducts probed. Perhaps in the ordinary operation for hepatic calculus by the surgeon inexperienced in the technic ten per cent. of calculi are overlooked. With a longitudinal incision in a convenient segment of the choledochus for palpation and view one can almost always force the calculus along the duct and deliver it through the in-

cision. The bile-ducts should be irrigated by means of a small canula.

With favorable circumstances the incision in the choledochus could be reunited by suture; however, in septic conditions the wound of the choledochus should be drained by a small strip of gauze or a small rubber tube sutured in position.

If the calculus be securely imbedded, lodged in the intraparietal duodenal segment of the ductus choledochus, the best method will be to incise the descending segment of the duodenum longitudinally and search for the biliary papilla, the sphincter of Oddi, whence the choledochus could be probed and incised, with removal of the calculus. The duodenal incision must be resutured. It would be of no use to resuture an incision in the choledochus and duodenal mucosa. The accompanying illustration (fig. 2) will explain the duodenal mucosa. My present view after two years of practice in cholecystectomy, with calculus in the choledochus, is to ligate the cystic artery and the ductus cysticus separately and remove the cholecyst. It is a prophylactic as biliary calculus originates in the cholecyst perhaps in 85 per cent. of subjects. Ample drainage is necessary in surgery on the ductus bilis.

Crisis and Treatment of Pneumonia.

Gillrath (*Am. Jour. Md. Asso.*, July 9, 1904) speaks of the unsettled state of the treatment of pneumonia, and its evils upon the public, the term crisis being a misnomer, and the evils of the use of stimulants in this state and gives his treatment in detail which is summed up in the following conclusions:

I do not offer this plan of treatment as a specific by any means, but know it has materially reduced my former mortality.

The first attention rendered the ordinary cases that are admitted to the hospital is a warm bath and a saline cathartic. The indications governing the administration of quinine and iron are as follows: When the temperature has reached 105 or over, 60 grains of quinin sulphate, to be administered as the initial dose, followed in one hour by one-half this amount, or 30 grains, and the following hour by one-half the latter dose, or 15 grains, at which time I began the administration of tincture of iron in doses ranging from 7 to 15 mins., depending on the date of the disease and the condition of the heart. If I see the patient on the first or second day of his attack, I usually begin with about 10 mins. of tincture of iron, increasing it one or two drops, or even more each day up to the sixth or seventh day unless the pulse remains full and strong.

I do not believe in giving quinin in small and repeated does during the active stages, but follow the plan as given in the reported case. When the temperature is 104 or over I give 50 grains of sulphate of quinin and follow the same course as above stated. When the temperature is 103 I give from 30 to 40 grains, following the same course as above stated.

During the convalescence I have found that one, or the combination of the following medicines, of value, elixir of iron, quinin and strychnia, guaiacol and cod-liver oil. But what has served me the best at this time, is thorough ventilation and sunlight, with plenty of milk, eggs and beefsteak.

NOTE (April 26, 1904).—The above paper has been held since March 26 on account of the increasing number of pneumonia cases, which has added material evidence in the success of my treatment, as the last twenty cases that

have been treated by my assistants and myself have been followed by twenty successive recoveries.

Meteorism Following Abdominal Operation.

(*Ther. Gazette.*)

Coudon reports 43 laparotomy cases in which he has employed ergot or ergone to prevent meterorism. He reports that none of the cases were troubled with meteorism, that there was less post-operative nausea and vomiting, and that general shock was markedly lessened. His method is to give thirty minims of ergone hypodermically twenty-four hours before operating. This dose is repeated every eight hours for four days. In addition to the ergone he gives ten grains each of betanapthol and salol the night before the operation to prevent excessive fermentation. He has had no ill results from the use of ergone, the ergot was quite irritating in some cases.

He devides meteorism into four clinical classes:

Class 1. Meteorism in the course of nervous affections such as hysteria and hypochondria. Tympanites is such a frequent symptom observed in hysteria that it has been called the vapor malady.

Class 2. Meteorism occurring in diseases of the gastrointestinal tract in which the mucous membrane is the seat of inflammation, such as gastritis, enteritis, and typhoid fever.

Class 3 includes the meteorism met with in the course of some of the infectious diseases, such as scarlet fever, measles, pneumonia, etc., and which is, no doubt, caused by the toxins acting upon the muscles of the intestines and the nerves supplying them.

Class 4 is the meteorism of traumatic origin or post-operative meteorism. Tympanites is sometimes seen to follow injuries to the abdomen, and frequently misleads the surgeons into believing the visceral injured.

The Classification and Diagnosis of Pulmonary Tuberculosis.

(*Col. Med. Jour.*)

Abrams states that tuberculosis permits of an etiologic, pathologic and clinical classification. Below are the two later classifications and the modes of onset of the chronic form.

PATHOLOGIC CLASSIFICATION.

1. Primary Department. 2 Spread of infection.

Primary Department: 1. Bronchogenic (development in the terminal bronchioles and the alveolar passages).

2. Hematogenic (development around and involving the terminal arterioles or capillaries in the intervesicular septa).

3. Lymphogenic (development along the lymphatic vessels in the interlobular septa).

Spread of Infection: 1. Through the bronchial tubes. 2. The lymphatics. 3. The blood.

CLINICAL CLASSIFICATION.

1. Acute; and 2, chronic pulmonary tuberculosis.

Acute: 1. Acute miliary tuberculosis of the lungs.

2. Acute pulmonary phthisis (acute caseous phthisis, galloping consumption), of which two varieties are recognized. (a) The pneumonic. (b) The broncho-pneumonic form.

Chronic: Chronic ulcerative phthisis and, when fibrous overgrowth predominates, a sub-form known as fibrous or fibroid phthisis. To the chronic form, I am constrained to add another vari-

city, although the frequency of its occurrence is not generally recognized; viz: Bronchial Phthisis.

MODES OF ONSET OF THE CHRONIC FORM.

1. *Insidious* (gradual failure of strength, anemia, cough, expectoration, anorexia, dyspepsia, emaciation and temperature elevation).

2. *Bronchial Catarrh.* (To the foregoing symptoms are added a history of repeated attacks of bronchial catarrh).

3. *Pleuritic Onset.* History of pleurisy with or without effusion.)

4. *Hemoptoic Onset.* (An attack of hemoptysis with or without a previous history of ill health).

5. *Laryngeal Onsets* This may signify that either the larynx is primarily involved (rare) or that the laryngeal symptoms (dysphonia, aphonia, etc), are out ofproportion to the pulmonary symptoms and mask the latter.

Hay Fever, Some Practical Suggestions as to its Management and Treatment.

Medical Record.

Parsons states that the predisposing causes of hay-fever to be, (1) An irritant to the nasal mucous membrane, such as pollen, dust, etc.; (2) a neurotic habit; (3) an obstructive lesion in the nose.

That hay-fever is due to a vaso-moter paresis of the walls of the blood vessels lining the nasal cavity.

He states that the treatment of hay-fever may be discussed under three heads, namely, (1) Constitutional, (2) local; (3) treatment of the exacerbation. (1)

(a) One of the best agents for securing a good tonic effect upon the nervous system is the daily morning cold plunge, which is to be taken immediately on rising. The immersion need only last for half a minute, followed by vigorous rubbing with a coarse towel. The use of the bath should be commenced several weeks before the usual time for the hay-fever to make its appearance. For those not in robust health, cold sponging of the neck and chest should be resorted to.

(b) The mode of life, and exercise should be regulated.

(c) Patients suffering from hay-fever are very susceptible to taking cold. They have a tendency to perspire easily, and if they allow themselves to cool off too suddenly, or expose themselves to a draft, they are very apt to bring on a paroxysm of sneezing. Hence suitable clothing and shoes should be worn.

(d) The sleeping-room should be well ventilated.

(e) Nerve tonics, such as strychnine, arsenic, and phosphorus, are indicated.

(2) In nearly all cases of hay-fever there is some patbological condition which should receive the proper treatment some months before the expected attack.

(3) Haig and others believe that hay-fever is due to a uric acid diathesis. He recommends the adoption of active measures for the treatment of the diathesis six weeks or two months before the expected onset of the exacerbation. Beaman gives 5 gr. of the saccharated extract of the dried suprarenal gland every 2 hours night and day until the remedy seems to be controlling the paralysis,or giddiness or palpitation comes on. He alsco recommends a cleansing alkaline solution to the nose to be followed by 1-5,000 adrenalin solution and then the use of an oil spray. He advises smoking of dried stramonium leaves, the cold spinal douche, an ice bag to the back of the neck, change of climate. We should not use opium or cocaine in any form. Pa-

tients should avoid alcohol and tobacco. They should not get overheated or exposed to draughts.

Caution in the Use of Suparenal Extracts.

The addition of the extract of the suparenal gland to the therepusis of haemoragic states meets many indications in treating these conditions, and the medical press teems with reports of its use in various disease belong to this category. Comparatively a new product, and while it has been studied by close observers its exact position as a thereputic agent is not as well defined as could be wished. In internal haemorrhage, its use is contra-indicated as it causes a rise in the blood pressure, and is therefore harmful rather than beneficial, and wherever the extract can be brought in direct contact with the bleeding surface, it checks the haemorrhage by constricting the blood vessels, and does not produce an increased blood pressure as in the systematic effect of internal administration, Urtricaria of a very pronounced type has followed its local use in the nose to facilitate examination, though this may have been a cutaneous eruption of reflex origin.

Removal of Tape Worm.

The worm is very difficult to remove, says Gerharh (*Med. News*) and there is no branch of medicine that has been carried on more successfully by the fakir than this. There are several very good remedies for its removal, the best probably being an etherial extract of male fern, kooso, pomegranite seed, turpentine and pumpkin seed. The last especially desirable in children on account of taste. The large doses of medicine to be used in most of them is the great drawback. The author uses a combination of two remedies—male fern and pelleterine—the latter an alkaloid of the pomegranite seed. Only one day need be lost, and only one meal—breakfast—omitted. Clear out the bowels thoroughly with castor oil or salts the day before, the last dose being taken at night after a light supper. Next morning at six o'clock give 20 grs. pelleterine lannate in two capsules. When this has operated freely—in two or three hours begin with the following:

℞ **Olie resinea aspidii ʒ ij.**
Hydrag chleridi mite gr. xii.
Aethenis ʒ ij.
M. et div. in capsulae No. 12.
Sig—Two every ten minutes.

No food is to be taken during this time. In two or three hours the worm will be expelled whole with its head fastened to its neck. Pass all dejections from the bowel in a vessel of warm water. Do not make traction on body of worm. Follow with light food if desired.

A Large Enema.—Tope details a case (*Med. World;* August) of severe pain in the bowels just above the umbilicus caused by a jump from a grain R. R. car to the ground. This failed to yield to anodynes and ordinary enemas, and was followed by vomiting, becoming stercerucious on the third day. A large rectal tube was passed full length up the rectum and attached to a bulb syring. With the hips elevated, and an assistant to knead the abdomen, warm water was forced into the bowels. The patient began to vomit when a gallon of water had been used, and continued to do so until five gallons had been injected and vomited with complete relief of all symptoms.

Immunity Against Infection in Abdominal Surgery.

The *Medical Record* in an editorial discusses a lecture by Prof. von Mikulicz-Radecki on this subject. It states that the prevention of infective disease may be effected in one of two ways, either by offering an obstacle to the entrance into the organism of the offending microbe, the Listerian plan, or by so strengthening the powers of resistance of the organism that it is able successfully to reject the microbic invasion, the Jennerian plan. That the Jennerian method, with few exceptions has been confined to the treatment of tetanus and rabies.

The abdomen is one field of surgical endeavor in which the application of antiseptic principles is uncertain. It is impossible to obtain a single serum which will immunize against all the bacteria which are liable to invade the field. A number of investigations have shown that, whether the bacteria are destroyed by active phagocytosis alone, or whether the leucocytes produce alexins which kill the bacteria outside the cell body or those two processes work together, general leucocytosis certainly does play a very important part in the struggle against bacteria. This condition of hyperlencocytosis has been induced artificially by injections of albumose, decinormal saline solution, boullion, nucleic acid, and tuberculin. Of these nucleic acid was found to be the best on guinea-pigs. Mikulicz injected 50 c.c. of a two per cent. solution of nucleic acid, subcutaneously, preliminary to 45 cases of laparotomy, in which the peritoneum was exposed to infection by the contents of the stomach, intestines, or bile ducts with 38 recoveries, and of the 7 deaths not one was due to peritonitis.

Dysmenorrhoea and Sterlity.

Fenwick (*Am. Jour. Surg. and Gne.*) in his paper limits his consideration of the subject to the form produced by the congenitally elongated or conical cervix. The difficulty in treating this form of trouble has been in opening and shortening the cervical canal, and keeping the opening patent, and for this purpose he uses an operation that he submits as effective and surgical which is as follows:

The patient being anesthetised and in the lithotomy position, the vaginous is well douched and cleansed. The posterior wall of the vagina is retracted by a weighted speculum, a double hook is passed through the anterior lip of the os and the cervix is drawn down. The cervical canal is then dilated by graduated metal sounds up to No. 16 or 16 ½; one blade of the scissors is then passed half way up the cervical canal—that is to say in many of these cases of conical cervix, from a half to three-quarters of an inch—and incision is made to that extent on either side; the posterior lip falls back, the anterior lip is drawn forward with the hook. A small needle with strong catgut is passed through the left side of the anterior lip, close to the upper angle of the incision, and then across through the corresponding point on the right side. The catgut is cut sufficiently short and a similar stitch is inserted about midway between the former and the tip of the cervix. The anterior lip is sponged clean of blood and first the upper and then the lower stitch is tied.

The result of course, is that the anterior lip of the cervix is indrawn together; the raw surface being closed completely, whilst the posterior lip is left flat and open. Two or three wool plugs are then applied tightly against

the cervix to check hemorrhage. These are removed in about sixteen hours, and then it is found that the posterior lip is glazed over with lymph and quite dry. In about a week, it is covered with mucous membrane extending up to the angle of the wound. Meanwhile, the catgut in the anterior lip is gradually softening, and, as a general rule, the wound gapes open, while at the same time it is becoming glazed over with mucous membrane. At the end of ten days, I cut the catgut stitches and remove them, and then the anterior lip flattens out and lies nearly in its normal position, but with this difference—that both the apposed surfaces being covered with mucous membrane they cannot adhere together; and on passing the finger one finds that the cervix is widely patent. As a rule, there is no discharge, and at the end of a fortnight the patient is able to resume her home life.

Hedonal.

(*Buffalo Med. Journal.*)

Taeffer has made a clinical study of this drug in the treatment of 25 cases of insomnia. It is a derivative of the Crethane group, appears in a chrystalline white powder, almost invaluable in cold water, but dissolved in hot water and alcohol, of a disagreeable taste, and is well tolerated by the stomach. It sometimes has a diuretic affect and the ingestion of fluids or administering with alcohol is condemned. It acts better on a partially empty tomach and in an acid rather than an alkaline medium. On account of the unpleasant taste it should be administered in coated tablets or capsules.

It does not act so well in cases of marked psychical excitement or where the mind is concentrated upon a concrete subject as in cases of mental strain or mental depression. As an hypnotic in pain Aspirin is advised in combination with Hedonal. The sleep produced cannot be distinguished from natural slumber and lasts from 2 to 5 hours, the patient falling asleep again. It leaves the physical and mental powers uninpaired and does not interfere with the pulse. Injurious effects were never noted, and unpleasant after effects were small and transient, and cumulative effects seem to be absent.

The drug was used for insomnia unattended with pain, and largely with old aged hysterical, neuresthenic, gouty, diabetic, melacholic and alcoholic persons. The observations were not made on any one under 35 years of age. The usual dose given was 15 grs. on retiring, and was not increased beyond 30 grs. From his studies he draws these conclusions:

"I would formulate my conclusions based upon my observations (25 cases) as follows: in all uncomplicated cases of sleeplessness hedonal is a quite reliable and absolutely harmless hypnotic, this being due to the fact that it is oxidized in the organism into carbonic acid, urea, and water, and is free from any poisonous decomposition products. Even Even when employed for a long time its effect is not impaired and it promises to become a real blessing to the many sufferers from insomnia."

A Unique Case of Chorea.

(*N. Y. and Phila. Med. Jour.*)

Wrightson reports a very severe case of chorea occurring in a young woman. Her previous history was negative except when 6 years old she had a very slight attack of chorea. She was married when 21 years old; two months afterwards she stopped menstruating, the next month she began to have slight twitchings in the muscles of the face.

portion of the artery. In five hours the These gradually increased in severity and distribution until the muscles of the extremties, of phonation and deglutition were involved. The usual remedies were tried but she grew rapidly worse. She was then placed on 15 gr. doses of sodium salicylate every three hours with a marked change for the better. Two weeks after being placed under the salicylate treatment she developed a well marked pleurisy with effusion. This was withdrawn by asperation and she made an uneventful recovery. Her temperature was never over 100° F.

Suture of the Brochial Artery.

(*Annals of Surgery.*)

Gaston Torrence of Birmingham, Ala., reports the case of a young boy whose arm was badly crushed midway between the elbow and shoulder by the wheels of a car. The muscles on the outer side of the bone were badly lacerated, exposing the bone. He was brought to the hospital and dressed. The next morning he had a temperature of 103° F. Under constant irrigation the temperature subsided and in a week the wound was clean. On the eighth day the arm began to bleed profusely. The wound was immediately reopened and it was seen that a funnel shaped ulcer the size of the point of a pencil had perforated the brochial artery. At every pulse-beat the whole of the blood stream was forced out through this opening. There was no radical pulse, the arm was cold, and of a dark color. His first suture was introduced with the arm extended, but tore out when tied, and he saw it would be necessary to flex the arm and keep it in that position. He used a small, full curved intestinal needle with fine purse string and found that it completely controlled the bleeding. A muscle flap was dissected up and grafted over the sutured radial pulse had returned and the arm was warm and normal in appearance. A good result was obtained and the patient is now able to use his arm.

Early Symptoms of Tuberculous.

Dr. G. C. Johnston (*American Medicine*), considers the following symptoms suspicious as indicating commencing tuberculosis. Grouped according to their importance they are:

(1) *Cough.*—A slight, hacking, persistent cough, which can be referred to the larynx or upper traches. It is worse at night or upon lying down. There is little or no expectoration.

(2) *A failing appetite.*—There is a repugnance for fatty foods and some degree of indigestion.

(3) *Loss of weight.*—Patient is a few pounds below his average weight.

(4) *Sleep sweats.*—Upon lying down, day or night, the patient awakes with neck and upper chest bathed in a warm or cold perspiration.

(5) *Accelerated pulse.*—A pulse of ninety to a hundred, which is quick, irritable and ill sustained.

(6) *Elevation of temperature.*—This is an unobtrusive symptom, but is of the highest importance. When a case of beginning tuberculosis is suspected, a temperature record at 2.30 p. m. on several successive days should be insisted upon. A temperature elevation of one degree is a symptom that must be accounted for absolutely by some other condition, or tuberculosis must be suspected and confirmatory symptoms looked for.

(7) *Fistula in ano.*—When syphilis is eliminated, this condition calls for careful examination of the chest.

(8) *Pleurisy with effusion.*—A history of pleurisy with effusion in a patient who complains of any of the abovementioned symptoms is important—*Jour. Med. and Science.*



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Furuncles — Abortive Treatment.— Gallois and Courcoux (*La Presse Medicale,* Feb. 17, 1904) employ a solution consisting of 4 grammes of iodine to 10 grammes of acetone for the abortive treatment of furuncles. The nodules are touched with an applicator carrying cotton staurated with the iodine solution. Lesions which have not suppurated, and even those which contain a drop or two of pus superficially, are aborted within twenty-four hours. Rarely a second application may be required. The solution is more caustic than the tincture and must be used with greater care. In an open wound it causes severe pain and may produce symptoms of iodism.—*Therapeutic Gazette.*

The Chicago Board of Education has decided to establish medical inspection in all schools. Teachers are to report diseases and insanitary conditions where the general health is menaced.

Among the resolutions adopted at the International Anti-Tuberculosis Congress, held at Copenhagen during the last week in May, were those favoring the study of hygiene in schools and universities, uniform schedules for tuberculosis statistics, the appointment of a commission to consider the question of the predisposition to tuberculosis, and the enforcement of regulations against expectoration in places of public assemblage. Paris, says an exchange, was selected as the place for the next congress, which will be held in 1905.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., SEPTEMBER, 1904. No. 9

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

Advice to Young Doctors.

The young doctor who settles in the country will necessarily be called upon to keep drugs and dispense his own prescriptions. The one who locates in a city or town may or may not do so, being governed by the existing surroundings.

There are many advantages in either case, and circumstances may arise to decide the matter with having to consider the advantages pro or con. While in most towns of any size there is always a drug store, the custom of the older physicians to dispense their the people in this respect and the character of the drug store will all have to be considered. However much the young doctor may prefer to write prescriptions, if it has been the habit of the older physicians to dispense their own drugs and this custom is still in force, the young doctor will be compelled to do likewise or go without practice. Without concert of action among the physicians, it would be an up-hill business to attempt a change in a community unaccustomed to paying for medical services and then buying the medicine. While the doctor is compounding his own prescriptions he may claim that he charges for his services and gives the medicine, the public believe otherwise, and hold that the fee paid whether it be large or small, is for the medicines furnished.

There is no ethical reason why a doctor should not dispense his own prescriptions. Pharmacy was originally a part of medicine, and as such was taught the doctor. It has become a separate and distinct profession as the growth of the healing art has outgrown the capacity of one mind to grasp and one body to meet in all its demands. The physician does and should know something of pharmacy, but he does not unless he has taken a course in the profession, knows it in all its details as it should be known.

While we do not wish to make invidious comparisons, and in what we say fully realize the worth of the pharmacist and the honorableness of his calling, the fact remains that the physician's profession is one of a higher order, and

it is detrimental to his standing to engage in the barter and sale of his remedies used in the treatment of disease. The doctor is not a commercialist in the practice of his profession, and the further he keeps away from the appearance of commercialism the more respect he will command as a professional man.

It is almost impossible for the physician to keep an adequate supply of medicines on hand for his purposes, without an expense that is disastrous to his income. The writer of this does a country practice in a small village, and by force of circumstances is, for the present, obliged to dispense his own drugs; hence can speak from experience. There is a disposition to use the ready prepared pharmaceuticals, the prescriptions of the manufacturing chemist, the pills and tablets that are so much more easily handled, and the semi-propietary preparations that every drug house is endeavoring to sell, many of these are ethical, that is the combination is given, and some are really beneficial. Others are only patent medicines under another name, and sold to the public through the doctor as the dispensing agent instead of the cross-roads country store or the city department emporium. Whatever the character of the preparation their use by the physician is fraught with evil. The want of time to do the work demands that every convenience possible be used to accomplish the task. With several waiting in the office for treatment or the daily rounds yet to be made, the tendency is to get over the dispensing as quickly as possible. This leads to a very serious mistake in substituting a remedy already prepared and that can be dispensed at once, when the doctor fully realizes that some change in the remedy would be better, but that its preparation would require some time. It makes, too, a routinist of the doctor, and treatment is often given rather in accordance with the remedies he has on his shelves than the demands of conditions found. These are broad assertions, and it is not intended to convey the idea that all physicians dispensing prescriptions do these things to their fullest extent, but the assertion is made that there is temptation to do so and a strong tendency in that direction with any doctor who attempts to compound his own medicines.

However good his intentions at the beginning, the dispensing doctor will eventually use the aforementioned ready prepared pharmaceuticals. There use engenders a spirit of laziness both in his mental considerations of his patient, and in the preparation of the medicines. He may give the case attention enough to diagnose it, but there his mental work ceases. The manufacturing chemist has been kind and thoughtful enough to supply him with a catalogue with an alphabetical list of diseases and the remedy for each one, so he has only to turn to his catalogue and see which pill or elixir is prescribed for this trouble. This is honest with neither yourself nor your patient. No physician with any self-respect wishes this state of affairs. The ignorant pretender or the one too lazy to think for himself may be satisfied to pursue this course, but it is better that the physician who wishes to advance in his profession should avoid the temptation and tendency.

Time is a large element in the compounding of prescriptions, and while it may not be so essential with the young doctor, still it can be much more profitably spent in some other way even though his office may not be crowded

with patients awaiting their turn while he prepares his medicines.

Environments may be such even in a large town as to necessitate the compounding of your own prescriptions. If so by all means avoid the evils of the course as much as possible.

There are some advantages in a doctor's dispensing his own drugs that appeal with more or less force to all according to the different surroundings. The principal one advanced is the knowledge that you know what your patient is taking. This is advanced on the presumption that there is substitution and the use of inferior preparations of drugs on the part of the dispensing druggist. That there is force in the argument under some circumstances may be true but that the crime, for criminality it is, is as widespread as is indicated by the hue and cry on the subject, is not true. Wherever it exists and cannot be remedied, it will be decidedly better for the doctor to furnish his remedies himself. With the thousands of different preparations advertised in all the papers and by pamphlets and the commercial drummer, it is impracticable for the druggist to keep stocked with even a majority of them. When one is called for by a customer, the druggist may, if he hasn't it in stock, recommend something else, but to substitute one remedy for another in a written prescription is very rarely done.

The question as to who is the owner of a prescription, the doctor, the patient, or the druggist, who fills it, is a mooted one. That many prescriptions are refilled without authority, and often for others for whom it was not intended, and sometimes to the detriment of the patient, is evident. Of course for such refilling the doctor gets no fee. The favorite prescriptions of a doctor, or his special formulas may in this way become public property without adequate compensation. These evils are avoided by the doctor dispensing his own drugs.

It is often necessary to resort to keeping a supply of drugs to meet "counter prescribing" on the part of the druggists probably a more prevalent evil than that of substituting. Patients certainly prefer securing their medical advice and medicines from the same person, and for simple ailments will buy remedies of the druggist, or even take medicines of his compounding. The doctor with his own drugs saves many of those calls though the fees are not adequate for the professional service, time and cost of the remedies.

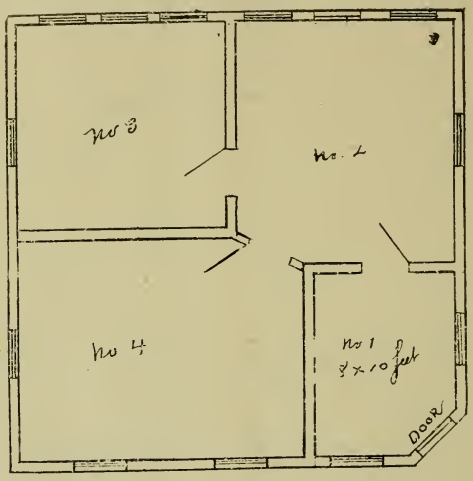
There are many troubles to which the flesh is heir, that the patient would prefer should not be known, even to the druggist, and not all druggists' files are kept as privately as they should be. The doctor dispensing his own prescriptions will get a large share of this class of work, and it is often a very remunerative one too.

To those who from necessity or choice dispense their own drugs, a few words will be added. Keep enough drugs on hand to meet all emergencies at least, and make arrangements with a good pharmacist to fill such prescriptions as you may need outside of your stock. Have your shelves made with special reference to the needs of your stock. Keep the drug department as scrupulously clean as if it were a small drug store. Have everything properly labelled. Keep a good supply of prescription vials and bottles, corks, pill and ointment boxes, drug envelopes, twine and wrapping paper. Write number and file your prescriptions, and label and number all packages sent

out. Avoid semiproprietary medicines and ready prepared pills and elixirs. Keep your buggy case well filled, clean and carry a supply of gummed labels and drug envelopes in it.

Plan of Doctor's Office.

The following suggestions regarding plan for physician's office are respectfuly submitted:



The whole building is to be twenty-four feet square, twelve feet pitch, with a hip roof. No. 1 is a reception and waiting room, and is 8x10 feet. Another door might be made communicating with No. 4 if desired. No. 2 is the general office. Two windows and a door are shown at the back end which takes up rather too much space, and one large window might serve the purposes of light and ventilation. No. 3 is intended for a consultation room, for gynecological examinations, and minor operations. One end is made up almost entirely of windows. These can be arranged in the form of a bay if desired, and a sky-light in the roof for additional light. No. 4 can be used as a drug room where one dispenses his own prescriptions, or as a laboratory if one is inclined to do experimental work. If desired an additional small room can be arranged between Nos. 3 and 4 by extending a bay at the end of No.3 and making both rooms some smaller.

The finishings of the interior can be made according to the tasts of the occupant or the funds to be expended. If it is intended to use No. 3 for an operating room, it should be finished in cement throughout with facilities for flushing walls and floor and making it aseptic.

The heating should be by furnace under the building with registers in each of the different rooms, but of course the offices can be heated by means of stoves, if desired.

Dairy and Food Commissioner Warren, of Philadelphia, has instituted a campaign against the dispensers of deleterious and impure summer drinks.

Editorial Comment.

Dr. C. F. Taylor the editor of *The Medical World,* is devoting some attention in editorials to the subject of Medical Journalism, and its ethics, with special reference to the Medical Brief and its shortcomings in this respect. He truly says that the object of a Medical Journal should be to serve the interests of the profession, not only in cold medical facts, but in all that pertains to the profession. The object should not be to serve the interests of the advertisers with an incidental service to the profession, but both should be considered, and the interests of the profession should come first. The Brief is portrayed as more of a medical almanac than a Journal, its contents, especially editorials, devoted to exploiting proprietary products, largely of those in which its editor is pecuniarily interested.

We notice several allusions in our exchanges to the use of the different products of superenal gland as a means of controlling epistaxis. Applied locally on a pledget of cotton and given internally at the same time, it is reported as acting charmingly.

A recent decision of the Circuit Court of Iowa says that parties to obtain redress before the courts must be sincere and no redress can be given to one operating a fraudulent concern. Hence patent medicine concerns and various appliances for the relieve of disease claiming impossibilities cannot recover in suits before the courts. The decision was on a case where the owners of the patent for "oxydonor" endeavored to obtain damages for an infringement on his rights. The court held that he could not recover because his claims were evidently fraudulent.

The following clipping from one of our exchanges may be of interest to some of our readers, who are called upon to furnish alcoholic stimulants to their patients, on account of the difficulty of securing them elsewhere:

Special Tax Liability of Physicians Furnishing Liquor. — The United States Commissioner of Internal Revenue ruled, July 11, 1904, that a practicing physician who, without holding the special tax stamp of a retail dealer under the internal revenue laws of the United States, furnishes his patients with distilled spirits, wine and malt liquors under conditions constituting sales of these liquors directly or indirectly, involves himself in liability to criminal prosecution under these laws, unless he shows that the liquors thus furnished have been compounded into medicines by the addition of some drug or medicinal ingredient. If the liquors are not so compounded he can not sell them even for medicinal use only without involving himself in special-tax liability."

Dr. H. C. Mansfield in a letter to *American Medicine* gives a note of caution in regard to quack nursing schools, that give a few weeks in theoretical instruction but not practical work. He urges that the regular, trained nurses should hasten to perfect their organizations, and through these and the aid of their allies, the medical profession, secure laws to protect them against these fraudulent concerns. Physicians needing the services of a trained nurse should see that one is secured from a school of reputation.

A recent contribution to the *Medical Summary* extols the use of nitric acid in various affections and says the diagnostic indication for its use is a violet

haze upon the tongue. This haze can sometimes be observed upon the edges of a cicatrix or upon the inside of the vulva or wherever the blood is near the surface. Whatever the disease, if there is a violet haze, the pathological condition will be relieved by the administration of nitric acid. It is under the conditions named a febrifuge alterative, diuretic stimulant, sedative, tonic, or emenagague. Special stress is placed upon its use in connection with quinine in malarial troubles.

In the crusade against patent medicines and nostrums, Spurgeon in a letter to the *Medical World* advises that the matter be discussed in the county and district medical societies, and a petition drawn up advocating the Webb bill, to which each doctor should attach his signature and secure as many additional ones from his clientele as possible These are then to be sent to Congressmen for the district by a strong committee or delegation and his support of the bill solicited. The plan suggested, if acted upon, could not fail to prove beneficial, and we most cordially endorse the suggestion.

Communication.

To the Editor of CAROLINA MEDICAL JOURNAL,

Dear Sir:

The *American Medical Society for the Study of Alcohol and Other Narcotics* was organized June 8, 1904, by the union of the American Association for the Study of Inebriety and the Medical Temperance Association. Both of these societies are composed of physicians interested in the study and treatment of inebriety and the physiological nature and action of alcohol and narcotics in health and disease. The first society was organized in 1870 and has published five volumes of transactions and twenty-seven yearly volumes of the *Quarterly Journal of Inebriety*, the organ of its association. The second society began in 1891 and has issued three volumes of transactions and for seven years publised a *Quarterly Bulletin* containing the papers read at its meetings. The special object of the union of the two societies is to create greater interest among physicians to study one of the greatest evils of modern times. Its plan of work is to encourage and promote more exact scientific studies of the nature and effects of alcohol in health and disease, particularly of its etiological, physiological and therapeutic relations. Second, to secure more accurate investigations of the diseases associated or following from the use of alcohol and narcotics. Third, to correct the present empirical treatment of these diseases by secret drugs and so-called specifics and to secure legislation, prohibiting the sale of nostrums claiming to be absolute cures containing dangerous poisons.

Fourth, to encourage special legislation for the care, control and medical treatment of spirit and drug takers. The alcoholic problem and the diseases which center and spring from it are becoming more prominent and its medical and hygienic importance have assumed such proportions that physicians everywhere are called on for advice and counsel. Public sentiment is turning to medical men for authorative facts and conclusions to enable them to realize the cause, means of prevention and cure of this evil. This new society comes to meet this want by enlisting medical men as members and stimulating new studies and researches from a broader and more scientific point of view. As a medical and hygienic topic

the alcoholic problem has an intense personal interest, not only to every physician, but to the public generally in every town and city in the country. This interest demands concentrated efforts through the medium of a society to clear away the present confusion, educate public sentiment, and make medical men the final authority in the consideration of the remedial measures for cure and prevention. For this purpose a most urgent appeal is made to all physicians to assist in making this society the medium and authority for the scientific study of the subject. The secretary, Dr. T. D. Crothers of Hartford, Conn., will be pleased to give any farther information.

Selections From Our Exchanges.

Enemata serves a wide range of usefulness, says Wainwright, (*Central States Med. Mag., July,* 1904), aside from the primary object of removing feces from the rectum and colon. Large quantities of water, hot or cold, may be necessary in constipation, but caution is necessary if there is diseased condition as the bowel may be ruptured. Use olive oil or glycerine separate or in combination for hardened feces. If high up use the knee chest position with rectal tube. Turpentine, assafœtida or inspissated ox gall are useful adjuncts when there is much gas. If to be retained the enema must be high up. Parasites require an irritating enema as vinegar, turpentine or quassia for expulsion. In inflammatory conditions add starch and laudanum. Use hot water (108°) for enema in shock. Six per cent. salt solution should be used in severe hemorrhage. Every four hours is as often as the rectum will tolerate enemas. Nutritive enemas can be used this often, but the bowel must be cleansed before their introduction. Eight ounces can be used at a time and it is not essential that the food be predigested. Milk, beef broth and the newer food products, tropon, somatose, plasmon and nutrose are used. Whiskey as stimulant and opium to allay irritation can be added. Medicinal enema are useful when drugs cannot be taken by the mouth and can be given in large doses. In these cases the bowel must be clean and the quantity of water as small as convenient. Absorption is by osmosis.

Digitallis and Cardiae Hypertrophy. —In order to settle the question as to whether the long continued administration of digitallis induces cardiæ hypertrophy, Dr. Frank B. Winn (*Jour. Am. Med. Assoc.,* July, 1904) instituted some experiments with Belgian hares. Twenty healthy female hares were selected and divided into two groups, as nearly equal as possible as to size and weight, and placed under same conditions, except one group was given a physiologically tested digitallis and the other held as a control group for 120 days. There was great tolerance of the drug, reaching as high as 90 minims of the tincture to each animal in 24 hours before ill effects in appetite etc., were noted. While the control animals remained docile the experimental group showed increased viciousness as the drug was increased. The control animals gained weight and the experiment group lost, and there were other evidences of impaired nutrition in loss of appetite and dimin-

ished luster of the hair at the time they were slaughtered. Comparative microscopic study failed to reveal any distinctive difference in the musculature of the two groups, and there was a slight increase in the weight of the hearts of the experimental group, and he concludes that the digitallis did produce a slight degree of hypertrophy, but that the remedy is responsible for hypertrophy to any great degree in valvular disease seems doubtful.

Tetanus Treated by Injection of Antitoxin Into the Spinal Theca.—Wallace and Sargent (*Lancet,* March 5, 1904) reports four cases of tetanus treated by the injection of anti-tetanic serum into the spinal theca. This method was first practiced by von Leyden, who employed two injections of 10 cubic centimeters each in one case, and the patient recovered. Penna records five cases treated in this manner with three recoveries. The injections varied from a total of 100 to 240 cubic centimeters of serum, as much as 60 cubic centimeters being used at one sitting; a corresponding quantity of cerebrospinal fluid always being withdrawn. The three cases that recovered had daily injections, and the symptoms subsided in from five to seventeen days. In the two fatal cases the patients died from pneumonia, but the spasms had ceased and the limbs were relaxed and could be moved. In no instance were any bad effects noticed.

The serum was injected by means of an antitoxin syringe provided with an especially long needle, introduced between the third and fourth lumbar vertebræ. In no case were any ill effects observed either immediately or at a later period.

The period of incubation in the writer's cases were respectively three to six, six, nine, and eleven days. Three patients recovered and one died, the fatal case being second in order to severity, both as regards period of incubation and the character of the symptoms.

It is still doubtful if the intradural will show any better results than the subcutaneous method. The lumbar injection is to be preferred to the intracranial.—*Therapeutic Gazette.*

The Action of Adrenalin.—R. Klapp (*Zeitschrift fuer Chirurgie,* 1904, *Vol. LXXI., p.* 187) agrees with Braun, who found that the cause of the value of adrenalin in the field of local anesthesia, is due to its producing an anemia of the tissues, into which it is injected; this, in its turn, produces a slowing in the absorption, and therefore an increase in the local action of cocaine or any other pain-destroying agent. Other measures inducing anemia, as cold, vertical suspension, etc., have the same inhabiting effect on the absorption. To note the amount which adrenalin actually permits, he injected one set of dogs with milksugar, another set with milksugar plus adrenalin, examining their catheterized urine hourly. He had noted before going to these experiments, that injections with as high as 20 drops adrenalin solution of 1-1000 strength, produces neither glycosuria nor local discoloration. The particulars of 21 experiments are given in text and graphically. He found that the addition of as small a quantity as 1 drop of a 1-1000 solution produces retardation, which increases proportionately as the dose is increased. The total of sugar excreted is always lower in the adrenalin than the control animals. The acme of the excretion is revealed during the second hour in the control animals; during the third or fourth in the others.

and it never reaches the same heights in the latter as in the former. During the first hour the adreualin dogs excreted very little, if any, of the sugar. He emphasizes that it can be used only then in practice, where temporary absorption slowing is demanded as in local anesthesia to increase the affect of the cocaine anesthesia.—*Therep. Rev.*

Nocturnal Incontinence of Urine—Retrorectal Saline Injections.—Beneficial results have been obtained from injections of saline solution, not only in cases of intractable sciatica and in neuralgia of the cauda equina, but in nocturnal incontinence of urine.

All the ordinary methods of treatment failing to give relief, Patel (quoted in *Edinburgh Medical Journal,* March, 1904) injected 200 grammes of the solution into the retrorectal space of a female patient of twenty-five. The following night there was no incontinence; there was, however, on the second night, and a second injection was made. The incontinence disappeared entirely, with no recurrence within six months. After the first injection in a second female patient of twenty, the incontinence disappeared for three days; after the second injection for six days. The third injection (200 grames) was followed by thirty days' continence; after the fourth injection (200 grammes there has been no recurrence.

The needle of the syringe is introduced at the tip of the coccyz, or to one side of it, and is passed vertically upward. A finger in the rectum guides the needle as it is passed in, and prevents perforation of the rectal wall. The fluids is slowly introduced. No anesthetic is required.—*Ther. Gazette.*

Treatment of Lime Burns of Eye.—The Railway Surgeon quotes Dr. W. Campbell Posey as saying: The most frequent cause of burns of the eye is unslakt lime, and the burn is caused by the lime's absorbing the moisture from the tissues, which is capable of causing deep sloughing. When burn from this cause occurs the lids should be at once everted, and the lime removed as far as possible; then cleanse the whole eye with oil to prevent further slaking of the lime; diluted vinegar will answer the purpose if no oil is available; a solution of cane sugar dropt into the eye will form an insoluble compound with the lime, and may be used where convenient; when none of these methods are at hand, the eye should be thoroly washt with water. In gunpowder burns of the eye, the grains are to be carefully removed with a cataract needle, and an anesthetic used. Great prostration follows severe injuries to the eyes, and therefore the patient should be kept in bed and upon a supportive treatment.—*Am. Journ. Surg. and Gynec.*

Menstruation.—The writer removed the uterus and one tube and ovary from each of two patients. In both these cases, through a curious accident, the uterine end of the tube left behind became attached to the vagina and its lumen remained patulous. Both these women menstruated regularly for several months after operation; indeed, they continued to menstruate until the author, fearing a tubal pregnancy, closed the orifices of the tubes. In both cases the tubes were sealed five months after the operation. The author believes that the dominant factor in menstruation is the ovary and ovulation; that from the ovary, or its sympathetic nerve ganglia in the pelvis

and abdomen, there springs the impulse for reproduction of the species; that menstration is a retrograde process, the result of a failure of fertilization of the ovum, and that the tubal mucous membrane as well as the endometrium participates actively in the process of menstration.—*J. R. Goffe* (*Medical Record,* May 7, 1907).

The Puerpera.—The writer believes that many of the ills to which women are heirs have their origin in the puerperium. The anatomical foundations for these many troubles are: general muscular weakness, abdominal distension and visceral ptosis, and uterine displacements. The author recommends that the general management of the puerperal woman should be somewhat as follows: The patient should be instructed to lie on her side or on her face and not on her back. After the fundus has descended to the pelvic brim it is advisable in many cases to use tampons, in order to keep the cervix elevated. General massage should be begun about the second day after delivery, and massage of the abdomen should receive special attention as involution progresses. About the fourth day passive movements are begun. The woman should be got out of bed as soon as possible, about the ninth day, and should be instructed to wear a special corset for the support of the lower abdomen.—*A. E. Gallant* (*American Medicine,* May 14, 1904.)—*Cyclop. of Med.*

The Relief of Insomnia.—Stewart (*Journal of American Medical Assoc.,* 1904, *Vol. XLII., p.* 1335) protests against the common routine employment of narcotic drugs in cases of insomnia. Besides the constitutional conditions such as neuralgia, or other painful diseases, indigestion, the over use of various drugs (caffein, etc.), and especially the effect of business worries, Stewart calls attention to poor ventilation in the bedroom as a frequent cause of imperfect sleep.

Much may be accomplished in the milder degrees of insomnia by the use of various hygienic measures. Very frequently a cup of warm milk or boullion taken on retiring will act as a simple sleep producer, gentle stroking massage of the forehead and neck will often also induce sleep. Conversation, games, brain work and other occupations which involve more or less excitement, are to be avoided. Another very potent factor in the production of sleep is that of suggestion, so that most persons sleep better under surroundings which have succeeded in producing sleep before.—*Therep. Rev.*

Little Things.—It is often the little things that cause us the most worry and anxiety. Hundreds of good, practical suggestions are yearly published in medical journals, but are frequently lost sight of in the mad scramble to learn the latest development in Prof. Scientific's pathological researches; to become acquainted with the latest classification of microbes, or indeed to be the first in any locality to experiment on some unfortunate individual with the latest product of some German paint or dye factory. A well-developed and misbehaving corn on the l ast quarter of an inch of a man's anatomy often causes him more annoyance and genuine discomfort than a double complete inguinal hernia, and a wart or mole on the face of a society belle, will, if removed, be responsible for more recommendations of your skill than is you had repaired the lacerated cervix with which she suffers in the privacy of her home. —*Albright's Pract.*

A Method of Arresting an Epileptic Fit.—McConaghey (*British Medical Journal,* May 28th, 1904, p .1,253) says that by turning an epileptic patient upon the left side, at the beginning of a fit, the convulsive movements can nearly always be arrested. Although the patient remains unconscious for some time, if he is turned on the left side during the stage of tonic spasm, the movements at once cease and there are no further convulsions. He has tried this treatment in a large number of cases in his epileptic ward and with uniformly good results. For this treatment, the value of which was discovered accidentally he offers no explanation, except the suggestion that it may possibly be due to the influence upon the circulation of the brain.—*Journal Med. Science.*

The Medical Editor's Home.—Here is a Castle. It is the Home of an Editor. It has stained Glass windows and Mahogany stairways. In front of the Castle is a Park. Is it not Sweet? The lady in the Park is the editor's wife. She wears a Costly robe of Velvet trimmed with Gold Lace, and there are Pearls and Rubies in her Hair. The editor sits on the front Stoop smoking an Havana Cigar. His little Children are playing with diamond Marbles on the Tesselated Floor. The editor can afford to Live in style. He gets Seventy-Five Dollars a month Wages.—*Eugene Field's Tribune Primer.*

Cause and Treatment of Rheumatism.—W. H. Porter (*Post-Graduate*) thinks that rheumatism is caused by over-feeding. In some cases it is the result of eating too much vegetable food; in other cases it is due to eating too much meat. In either case it is the result of deficient oxygenation. The essential thing, therefore, in treatment, is to regulate the diet—to keep the patient well within the oxidizing capacity of his system. For immediate relief salicylic acid is, of course, the indicated remedy. Dr. Porter likes the following formula:

℞ **Acid salicylic, ʒiij:**
Sodium bicarbonate, ʒij.
Potassium iodid, ʒj-iij.
Elix. of gaultheria,
Glycerin, aa ℥j.
Aq., ℥ iv.

M. Sig. One teaspoonful every two hours.—*The Medical Standard.*

For Chronic Gonorrhœa.—When a gleety discharge is due to the presence of a granular patch in the anterior urethra and not to a stricture or posterior urethritis, an injection of three grains each of acetate of lead, sulphate of zinc and alum to the ounce of water will be found most effective. It forms a precipitate, so that the bottle (and even the syringe) must be well shaken just before making the injection—the object being to deposit the precipitate in the urethra, where it will remain for hours, the acid being incompatible with the development of gonorrheal germs. Injection should be made thrice daily.

Prostration of the Circulation.—Bishop (*Buf. Med. Jour., April,* 1904.) proposes this name to cover certain defects occasionally met with in the circulation, preventing disturbance of function, and which are capable of complete recovery, though as often as not they go on to manifestation of organic disease.

It is stated that smallpox is steadily spreading in the Asiatic provinces of Turkey.

NEWER MATERIA MEDICA.

Gastro-Intestinal Irritations and Their Treatment.

By Brose S. Horne, M.D., Ex-Physician Indiana State Prison, Marion, Indiana.

Enteritis is only a clinical expression and the disease is due to many causes. The most fruitful cause is drinking water contaminated by the discharges from diseased patients. Exposure to cold, bad food, through nervous influence and by direct irritation of the mucous membrane, may produce individual cases of the catarrhal forms. In army life this disease is quite frequent and is described under the name of dysentery. In crowded places, as in the army or in prison, epidemics will arise and frequently the whole mass of humanity will be taken down with this dreadful disease.

There are many micro-organisms found in the discharges from these patients. One is the amoeba dysenteria, claimed by some to be the main cause, but it is doubtful if any one organism can be pointed out as the specific cause of the trouble. It is a settled question now that some poison introduced into the system produces these gastro-intestinal troubles such as gastro-enteritis, entero-colitis, epidemic dysentery, etc.

We need not dwell on either particular nosological classification as the treatment is about the same in either one of the entities. The common symptoms met with in these disorders are about the same. They will commence with a light form of gastro-intestinal catarrh. After the stage of incubation which may last from a few hours to a few days, symptoms of dyspepsia and diarrhœa set in. There is anorexia, heartburn, nausea, vomiting, borborygmus, often pain in the abdomen and copious fluid discharges. In some cases there is violent griping and colicky pains with a sensation of depression. The patient in some cases is unable to leave the stool. The tenesmus is frightful, making the patient not only a misery to himself but to his friends as well. Often the patient will sit at stool hours at a time until he becomes so faint and weak that he cannot leave it without assistance. There is great depression in these cases. The constant nausea, with occasional vomiting, and tenesmus causes great prostration.

During the winter of 1901-1902 an epidemic started in Michigan City, Indiana. At that time the writer was physician of the Indiana State Prison. Hundreds of cases developed; the inmates of the prison were infected as well as some of the officers of the institution. The general suffering was great indeed. In these cases all of the symptoms were those of a case of poisoning. The skin is hot and dry, the tongue is heavily coated, the face soon wears an anxious expression, the abdomen becomes distended; there are constant discharges of mucous, blood and pus, some cases would go to stool as high as two hundred times in twenty-four hours. In the worst cases the patient would sit or lie upon the bed most of the day not caring apparently whether he lived or not. The first discharges, as a rule, in these cases were like the white of an egg; later on they would be tinged with blood. The general symptoms were alarming. At times a person would be tempted to call

the case cholera. In some cases there would be fever and in others there would be none. To give some idea of the cases I will cite one or two.

John S., age 32, white, was taken sick with a discharge of mucous from the bowels. He had tenesmus, griping pains, went to stool one hundred and twenty times the first twenty-four hours. He was given the ordinary treatment without any relief whatever. After the first forty-eight hours his bowels were washed out with a solution of hot water and Glyco-Thymoline two ounces to each pint of water. He was given a few doses of Dover's powder and a half a tablespoonful of Glyco-Thymoline in a little water every two hours. In forty-eight hours from the beginning of this treatment he was up and around. The constant vomiting he had disappeared after the third dose of Glyco-Thymoline.

William C., age 24, white, had same symptoms as the other case with the exception of passing blood; was given same treatment with the addition of Fl. Ext. of Ipecac. He recovered in thirty-six hours.

Over eighty cases were treated with the hot water and Glyco-Thymoline and every case recovered in from twenty-four to forty-eight hours.

The old treatment with calomel, opium, salol, etc., was a failure. The antiseptic and alkaline treatment was a success. After one enema of the solution of hot water and Glyco-Thymoline the patients would often lie down and rest for some time. In these cases where there was such an extreme amount of decomposition going on in the gastro-intestinal canal, only the most heroic medication would give relief. In some cases we would pass a Langdon colon tube high up in the bowel and wash it out with the hot water and Glyco-Thymoline, besides giving a tablespoonful of the medicine internally. Some of the cases that were treated early never reached the serious stage but recovered after having the symptoms of a mild attack of gastro-enteritis. There is no question but that an enema of hot water with the Glyco-Thymoline will abort these cases.

The direct and only indication in these cases of intestinal poison is to get rid of the intestinal accumulations and introduce into the canal an alkaline antiseptic that will destroy the becterial infection and neutralize the excess of acid, also give the medicine by the stomach in order to keep it in an antiseptic condition.

When the gastro-intestinal canal is in a normal condition the food that passes from the stomach to the bowel is acid, the fluids in the intestine neutralize the excess of acid and it becomes alkaline. In these cases of gastro-intestinal irritation the fluids of the intestine frequently fail to do their duty and the excess of acid starts up and encourages the irritation, so by introducing into the canal an alkaline substance like glyco-thymoline, we overcome the excess of acid and as it is also antiseptic, we stop decomposition.

The clinical value of this treatment cannot be estimated until it is given a trial. The treatment must be heroic and the remedy should be given in large doses. It is impossible to overestimate the value of this treatment in cleansing, disinfecting and constringing the foul, acid, flabby surface of the whole seat of the disease.

Of all the remedies which have been recommended in the relief of these intestinal irritations none come any way near equalling the treatment with hot water and glyco-thymoline as enemas and this

remedy given by the stomach.

Hegas has shown how the whole tract of the large intestine can be thoroughly inundated and flushed with a rubber tube and funnel, so let us take advantage of this system and introduce our antiseptic solution and not only cure, but frequently abort these grave maladies.

The successful treatment of these troubles in any form depends upon a recognition of the fact that the disease is local as to its seat and specific as to its cause. Taking all of these things into consideration, the best thing that can be done is to irrigate with glycothymoline (Kress), an alkaline and antiseptic wash and also give it internally.

Anodynes only relieve effects but they do not relieve the cause. This treatment removes the cause and recovevidence is sure evidence. He who doubts should test the treatment and be convinced that it does cure these diseases of the gastro-intestinal tract.

Glycogen in Diabetic Albuminuria.—The writer calls attention to the value of glycogen in the treatment of diabetic albuminuria. He recalls the fact that last year he was led to conclude that the hepatic cell in diabetics seemed to have lost the power of fixing glycogen in its cytoplasm. His researches have since been confirmed by Monier, of Liege. This brings to mind the fact that Frerichs many years ago, having obtained by trocar from a diabetic patient a parcel of hepatic tissue, ascertained microscopically the absence of glycogen in the hepatic cell. Albuminuria is a grave complication of diabetes and requires active treatment. Unfortunately, this symptom and diabetes are, as it were, antagonistic, the former requiring a milk diet, or at least a diet rich in hydrocarbons; the second, on the contrary, demanding a diet from which are excluded as much as possible starches and sugars. Again, considering the condition of the kidneys in diabetics, certain remedies now used, antiprin and other toxics, cannot be employed. The writer found that the methodic use of glycogen seemed to avoid this difficulty, and mentions a number of cases with charts to sustain his point. The dose administered began, as a rule, with one gramme (15 grains) in the course of the day.—*M. Laumonier* (*Bulletin General de Therapeutique,* January 15th, 1904.—*From Monthly Cyclopedia,* April, 1904.)

The Benefit of Fasting in Typhoid Fever.—Dr. R. M. Harbin (*Jour. Am. Md. Ass'n.,* July 11, 1903) reports ninety cases of typhoid fever with four deaths, from which statistics he concludes as follows:

1. Fasting and a restricted diet are indicated because of pathologic conditions.

2. Emaciation occurs independently of the amount of food taken.

3. All severe cases should be subjected to fasting for twenty-four to forty-eight hours to relieve the active symptoms, which exhaust the patient more rapidly than the lack of food.

4. After a fast a restricted diet of broths, diluted milk, etc., should be prescribed in definite quantities.

5. Gelatin prevents too rapid emaciation in certain cases and renders hemorrhage less liable.

6. The cold bath or the modified cold bath is more effective during a fast.

7. Peristalsis favors the absorption of toxins, and cathartics should be used only to remove undigested food.

8. The presence of intestinal ulcers should be assumed to exist in every case, and the proper treatment is rest, which

is better attained by fasting and a restricted diet, thus preventing hemorhage and perforation.

9. The presence of diarrhœa and vomiting indicates the adoption of the fasting treatment.

10. Fasting and a restricted diet shorten the course of the disease, and many cases run an abortive course after the amphibolic period.

11. Many of the vaunted cures from specific drugs are dietetic in fact.

12. Recrudescences are nearly always due to dietetic errors.

13. In the above report, forty-five consecutive cases occurred without death. Of eighty-seven whites, two, or 2.2 per cent., died. Of colored, two died, and the low mortality of 4.4 per cent. of all cases was ascribed to the above treatment.

Apropos of fasting in continued fevers. Coca in the form of Vin Mariani, which may be given well diluted with cool water, has been advocated with pronounced success. It not only allays the abnormal craving for food, but relieves the intense thirst which is so distressing to both patient and attendants.—The *Cocoa Leaf*, December, 1903.

Fitchmul Facts.—This is the title of a pamphlet published by The Fitchmul Company, Concord, New Hampshire, and submitted to the members of the American Medical Association at its annual meeting, held at Atlantic City, N. J., in June last. The little brochure is most tastefully got up, and reflects much credit upon the designer, the compiler, the printer and The Fitchmul Company. The cover as most attractive in appearance and the body is unique in its design and arrangement. In short it may be said that facts concerning the excellent preparation known as Fitchmul have been presented in most pleasing guise, briefly and concisely and without vain repetition. It cannot then be wondered at that "Fitchmul Facts" attracted a large share of attention at the meeting of the American Medical Association, and that it was frequently referred to in conversation among members of the profession.

Treatment of Chronic Ulcer of the Leg of Long Standing.

By Horatio W. A. Cowan, M. B. C. M. Aberd.

(*From The Lancet, London, Eng., July 2, 1904.*)

At the beginning of the present year I was called to a woman, aged 54 years, who had a chronic sloughing ulcer for 22 years situated on the outside of the left leg, some ten inches long and three inches wide, with indurated edges and some thrombosis of the veins of the inside of the knee. Having first cleansed the ulcer with charcoal poultices for two days I applied wet butter cloth and then spread antiphlogistine over it after which cotton wool and a bandage were put on. This was done every day by the patient's friend for four months. The ulcer is now quite healed over and the induration is all gone. She is able to resume her ordinary housework. I publish this case in the hope that it might be useful to others as Unna's paste and all sorts of methods had been previously tried. I may say that I have no personal interest in antiphlogistine.

A Scotch Doctor's Opinion.—The *Quarterly Journal of Inebriety*, so well and favorably known through the instrumentality of its brilliant and philanthropic editor, T. D. Crothers, A. M., M. D., quotes the following statement in reference to pain relieving remedies, from one of Great Britain's noted

medical men, Dr. John Stewart Norvell, Resident Surgeon, Royal Infirmary, Edinburgh: "Antikamnia Tablets are a remedy for almost every kind of pain, particularly for headaches, neuralgias and neuroses due to irregularities of menstruation. They act with wonderful promptness; the dosage is small, two tablets. The undesirable after-effects so commonly attending the use of other coaltar analgesics are entire absent and they can therefore be safely put into the hands of patients, for use without the personal supervision of the physician."

It's Cool in Michigan.—Heat is terribly depressing. Heat weakens the heart, thins the blood, and exhausts the nerves. Heat destroys the appetite, hinders assimilation, and weakens the vital powers.

That is the reason why so many babies die during a hot spell, and why invalids should avoid exposure to extreme heat. Sunlight is invigorating, but extreme sun heat is devitalizing.

It's cool in Michigan. No hot winds, no sunstroke, no sultry days, not hot nights. Delicious lake breezes from the east, west, north, southeast, southwest, for Michigan is a peninsula nearly surrounded by a great inland sea.

Cool nights, green fields, fragrant meadows, hundreds of rippling trout streams draining hundreds of quiet, cosy lakes with dry, shady banks. Great forests of oak, maple, beech, sycamore and pine filling the air with fragrance and ozone.

There is health in the air of Michigan. No malaria-carrying mosquitoes; no swamp-miasma-laden fogs.

The Battle Creek Sanitarium is located in the midst of all this health and beauty. At this great institution are presented the greatest combination of natural and scientific advantages for health-getting to be found on earth. It is a great "health university" where "incurables" are cured. Everybody is kept busy all day long getting well. A varied and interesting program from morning till night. No time to get homesick; no time for the blues.

A month at the Battle Creek Sanitarium, with the advantages of its outdoor gymnasium, its unequaled baths and system of scientific health training; delicious, appetizing, easily digestible, blood and tissue-building bills of fare, is worth half a year at any seaside resort as a means of rest, recuperation, and health-building.

Do you know anything of the Alkaloidal treatment of disease? Do you want to know? Then send for a complimentary copy of Abbott's Digest. This little brief review of therapeutics gives you a great deal of information on the action of the alkaloids and active principles. It will repay the trouble that you take many times. Send for it *now*. Mention this journal. Address, The Abbott Alkaloidal Co., Ravenswood Station, Chicago, I..

When the menses are suppressed from exposure or from colds, wet feet, the result of emotional excitement, or febrile conditions, if not complicated with organic change, but by a more passive congestion, Aletris Cordial Rio is a very reliable remedy. It is an emmenagogue, not abortifacient.

The Director of the Chicago Municipal Laboratory, Dr. J. F. Biehn, recently sent out a warning of danger of an epidemic of rabies. Muzzling of all dogs that appear in public is the remedy advocated by him.

BOOK REVIEWS.

THE BLUES.—(Splanchnic Neurasthenia) Causes and Cure. By Albert Abrhams, A. M., M. D., (Heidelberg) T. R. M. S. Consulting Physician, Denver National Hospital for Consumptives; The Mount Zion and French Hospitals, San Francisco; President of the Emanuel Sisterhood Polyclinic: formerly Professor of Pathology and Director of the Medi-Clinic, Cooper Medical College, San Francisco. Published by E. B. Treat & Co., 241-243 West 23rd Street, New York. Price, $1.50.

The author of this work is a well known writer on diseases of the nervous system, and is always a pleasant and interesting one, and generally an original one, too. The book is a small one of 240 pages and deals with a special form of nerve exhaustion through the splanchnic vein. The factors entering into the causation of the trouble, which is widespread, and often unrecognized, or, if recognized, lightly spoken of, are in the intra-abdominal veins, and the cure for it is in the proper development of the abdominal muscles. Both the cause and cure are full treated, special stress being laid upon the proper exercise of the muscles of the abdominal walls and appliances for this purpose are described and illustrated. The book is an interesting and instructive one and will amply repay its cost and reading.

A TEXT-BOOK OF ALKALOIDAL THERAPEUTICS.—Being a condensed resume of all available literature on the subject of the active principles added to the personal experience of the authors. By W. F. Waugh, M. D., and W. C. Abbott, M. D., with the collaboration of E. M. Epstein, M. D. The Clinic Publishing Co., Chicago, Ill., 1904.

The authors have dedicated this book to those who believe in "The smallest possible quantity of the best obtainable means to produce a desired therapeutic result." Much of the subject matter of this text-book has appeared in the various numbers of the *Alkaloidal Clinic* and other journals, but has necessarily been scattered over a long period. The many readers of the *Clinic* will recognize the urgent necessity for a work upon Alkaloidal Therapeutics, such as the authors have presented, that should be as complete as the present knowledge of the subject will permit. They well state that the physicians who practice alkalometry, who have rejected the crudity and inexactness of the galenicals for the elegance, accuracy of dosage and activity of the active-principle remedies, are now counted by the tens of thousands. Works of reference must be created to collect, supplement and "codify" this widening stream of material, in order to make it immediately available to the alkaloidal student and practitioner. To the many students of alkalometry and to those who may wish to study the alkaloidal idea this work may be taken as a fair digest of the topics treated upon and as such is recommended.

RADIOTHERAPY, PHOTOTHERAPY AND HIGH FREQUENCY CURRENT.—The Medical and Surgical Applications of Radiology in Diagnosis and Treatment. By Charles Warrenne Allen, M. D., Professor of Dermatology in

the New York Post-Graduate Medical School. Octavo, 618 pages, 131 engravings and 27 plates. Cloth, $4.50, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

Recent discoveries in radient energy have developed a new and important system of therapy. Radiotherapy must still be considered as in its infancy, but such positive results have already been achieved in some hitherto intractable maladies as to warrant us in considering it a very efficient addition to the resources of the profession. Dr. Allen tells us that his work is based upon practical experience as well as upon a careful review of the great mass of literature on the subject coming from almost all quarters of the globe. In a science so new much faulty observation has been encountered, and in this volume he has spared no effort to eliminate the errors and to present the the subject correctly and abreast of its position. Radiotherapy has been treated briefly in the present volume, and the space thus gained has been devoted to the newer, larger and more important field of therapy. Ample imformation is given upon the physical as well as the technical side to equip the reader for the selection and management of appliances. As the object of the work is practical much attention has been given to questions of diagnosis and treatment. Cautionary directions are carefully given and exact instructions for the determination of dosage, a point quite as important as in the case of drugs. We recommend this work to all those who are endeavoring to apply the principals of radiotherapy or who wish to keep abreast with this important field of ray-therapy.

Von Bergmann's Surgery. A System of Practical Surgery. By Drs. E. von Bergmaan, of Berlin, P. von Bruns, of Tubingen, and J. von. Mikulicz, of Breslau. Edited by William T. Bull, M. D., Professor of Surgery in the College of Physics and Surgeons (Columbia University), New York. To be complete in five imperial octavo volumes, containing over 4,000 pages, 1,600 engravings and 110 full-page plates in colors and monochrome. Sold by subscription only. Per volume, net, cloth, $6.00; leather, $7.00; half morocco, $8.50. Volume IV just ready. 757 pages, 345 engravings, 16 plates. Lea Brothers & Co., Publishers. Philadelphia and New York, 1904.

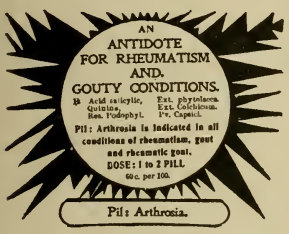
Every physician be he student, surgeon or general practitioner, should have a complete system of surgery in his library. For those who have use for such a system we know of no work that we can recommend more highly than von Bergmann's system of practical surgery which is now appearing. The American edition was translated and edited by Dr. Wm. T. Bull, of New York. In his editorial preface he well says that it is an encyclopædia, and that man yof its chapters exceed in scope and detail special treaties which have been published on their subjects ,and at the same time that the great value of the work lies in its practical and clinical character. These five volumes in themselves will constitute a complete working library on surgery.

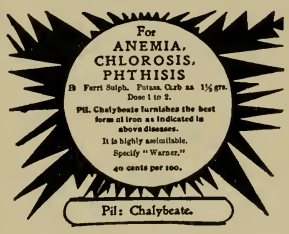
The fourth volume which has just appeared covers the immensely important subject of the whole alimentary tract, including Hernia. We wish to call especial attention to the chapters on the stomach and the surgery of the biliary passages. These chapters which are of especial interest to the abdominal surgeon at the present time are splendidly written and well illustrated.

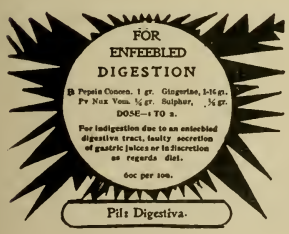
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Also to plates III and IV which give the outlines of the deeper abdominal viscera and the topographical anatomy of the abdominal viscera. Two full page colored plates are devoted to the arrangement of the caecal and colic peritoneum as it relates to appendicitis (Huntington). Four full page plates illustrating the various varieties of appendicitis are also highly instructive to those who advocate the medical treatment of appendicitis.

Everybody's Magazine.

The secret method of multiplying millions by which the enormous fortunes of Standard Oil and other big financial institutions were created veritably out of nothing is the text of the September instalment of "Frenzied Finance," by Thomas W. Lawson, in *Everybody's Magazine*. It is not exaggeration to say that the article is of the most sensational interest and importance. The story of how Standard Oil set about getting the control of banks and trust and insurance companies; how it juggled their funds so as to extend its operations; the process of the "trustification" of corporations as they practice it, and the upbuilding of the greatest financial power in America to day, makes a revelation of the most startling significance. The mystifying complexities of finance offer no difficulties Mr. Lawson cannot get past, and his explanations are extraordinarily clear and convincing. He frankly states his own participation in the Amalgamated deal, declares that the various partners, including himself, received much less than the share of the profits they were entitled to, and winds up an extraordinary impressive article with a picture of how the Amalgamated deal was carried though in the National City Bank.

Those qualities of timeliness and general readableness which characterize *Everybody's* are well to the fore in the September isue. A capital article on motor boats—the new, swift, high-powered pleasure-craft—tells fully of these late toys of the millionaire class. The "Deepest Mine in the World" describes the wonderful copper mines of Michigan. In "The Campaign Spellbinder" Lindsay Denison describes the ways and methods of certain political orators and narrates many diverting stories. There are ten first-rate short stories—one, in verse, by Wallace Irwin, besides the third instalment of Hall Caine's serial, "The Prodigal Son." which is undoubtedly the big novel of the year.

Sweet Potatoes.—A pamphlet, "Cultivation and Storage of Sweet Potatoes," gives, as is believed, a more practical plan for keeping potatoes than any other that has heretofore been placed before the people Important and valuable information that is not contained in any other known publication is here given. Potatoes can thus easily be kept in good condition twelve months or longer. The pamphlet is worth, even to life-long potato growers, much more than the price asked.

A. F. Funderburk, Dudley, S. C., in speaking of this pamphlet says: "I would not take ten times its cost for it."

The pamphlet has been introduced into twenty States and three Territories. The plans are simple and easily understood. They can be made available for old style potato houses, or for new ones, specially built, preferably the latter. Order now. Do not delay.

Price 50 cents, postpaid. Address:

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SITUATION—Healthful, moral, condusive of study.

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An easily accessible but secluded **HOME** for the private treatment of **Mental** and **Nervous Disease, Alcohol** and **Drug Habitues**. An old Colonial place, over 100 acres, mature in grove, grass and vine; new only in equipment. Buildings brick, with brick partitions; 250 feet of wide veranda; new lighting plant; new hot water heating plant, besides open fire-places in every room. Billiards, pool, golf, tennis, etc. Committed or voluntary patients received. Sanitarium one mile from station; macadamized road; long distance phone 149. Carriages meet all trains on call. **Address Box 48, Charlottesville, Va.**

Medical News and Items.

(*Medical Age.*)

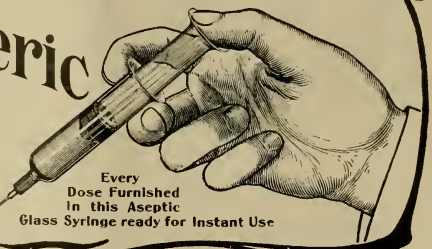
Japan has 31,000 physicians and eight medical schools.

In San Antonio, Texas, a new force has been introduced in the warfare against the mosquito. Dr. Kohnke, the health officer of New Orleans, has met with great difficulties in his endeavors to "organize victory" against the baleful Anopheles, and this led him to conceive the idea of enlisting the aid of schoolboys in the work. He preached his new children's crusade at Laredo, San Antonio, Houston and Galveston, and with the co-operation of the superintendent of the Board of Education of San Antonio he enrolled a number of the school children in his anti-mosquito army. It is proposed to carry on the fight on the same plan in New Orleans. It is certainly a happy thought to utilize the natural destructive tendencies of schoolboys for the extermination of the pestilent insects.

The opening and dedication of the new medical laboratories of the University of Pennsylvania were held June 11. The exercises, says an exchange, were attended by physicians from all parts of the country, and many prominent European physicians were present. A special train conveyed a large contingent of members of the American Medical Association from Atlantic City. The address of presentation was delivered by J. Vaughan Merrick, member of the Board of Trustees, and formal addresses were made in the Laboratory of Pathological Histology by Dr. Henry P. Bowditch,

Anti-Dysenteric Serum

"Mulfords"



The most promising Therapeutic Agent since Antitoxin.

PROF. SIMON FLEXNER, President of the Rockefeller Institute for Medical Research, and his co-workers, have proved by experiments extending over three years, that cholera infantum is usually caused by infection with the bacillus dysenteriæ (Medical Bulletin, University of Pennsylvania, November, 1902). During this period we have co-operated with Professor Flexner in preparing a serum for the curative treatment of cholera infantum and dysentery, and now offer, by his authority,

Mulford's Anti-Dysenteric Serum

from animals that have been thoroughly immunized, by a continuous treatment of nearly three years, against the bacillus dysenteriæ, and recommend its use in the treatment of cholera infantum and dysentery.

The serum is a mixture of that obtained from the blood of horses immunized with each of the different types of bacillus dysenteriæ, corresponding to those that do and do not ferment mannit.

Three-Fourths of the Mortality

occurring in children under four years of age is caused by cholera infantum, consequently, a curative serum that promises to reduce this mortality is a boon to humanity.

We are confident that Anti-Dysenteric Serum will reduce the mortality of cholera infantum and dysentery to the same extent that Mulford's Antitoxin has reduced the mortality of diphtheria.

Clinical Report

Shiga reports 1119 cases of dysentery treated at Tokio:

266 cases WITH serum, mortality, 9.6 per cent.
853 " without " " 32.6 per cent.

It is believed that cases treated early and with full doses will show a further reduction in mortality; the same rule applying with Anti-Dysenteric Serum as with Antitoxin.

The serum does not in any way conflict with the usual treatment, and is indicated in cholera infantum and dysentery, particularly when the discharges contain mucus and are tinged with blood.

DOSE.—For infants, 1 to 2 packages (10 to 20 c.c.); children and adults, 2 to 4 packages (20 to 40 c.c.) every four to eight hours. Mulford's Anti-Dysenteric Serum is furnished in aseptic glass syringes, each containing 10 c.c., price, $2.00, and may be secured from the distributors of our Diphtheria Antitoxin.

H. K. MULFORD COMPANY

SUPERIOR TO THE BITTER ELIXIRS AND FAR MORE RELIABLE THAN THE SWEET SYRUPS OF QUININE IS

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Quinine, Iron and Pepsin Tonic.

Containing as it does the three sheet anchors of therapeutics, stamps it the Ideal Tonic—

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professor of physiology, Harvard University; Prof. R. H. Chrittenden, director of the Sheffield Scientific School, Yale University; Dr. George Dock, professor of medicine, University of Michigan; and Dr. Horatio C. Wood, professor of materia medica, pharmacy, and therapeutics, University of Pennsylvania. In completeness of construction and equipment the new building is without a rival. The erection of the laboratories has occupied four years, and has cost, exclusive of ground and equipment, $700,000.

It is customary among physicians and physiologists to refer to the physiologic 0.6 per cent. salt solution as "normal saline solution." The *Pharmaceutical Journal* claims that this is liable to be confounded with the chemist's normal volumetric solution of sodium chloride which has occasionally been supplied for physiologic purposes when normal saline solution was asked for. In one case the patient died; in the other the result is unknown. Physiologic salt solution is usually wanted in a hurry, and it is likely that in the confusion such an error might be made. As the chemical normal saline solution is nearly ten times as strong as the physiologic solution, disastrous results are likely to happen. Since this chemical saline solution is but one of a series of volumetric solutions, each of which is styled "normal," chemists can hardly be asked to change the name. It would therefore be better for physicians not to use the term "normal" saline solution as applied to the 0.6 per cent. solution of sodium chloride for physiologic purposes, and to adhere carefully to the term "physiologic" or "medical" salt solution.

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Prof. Elmer Gates, director of the Laboratory of Experimental Psychology at Washington, claims (*Practical Druggist*) to have produced the first absolute chemical vacuum known to science, and from which he has created rays which exhibit strange phenomena never mentioned as accompanying the Roentgen rays. The method of making the absolute vacuum was so simple and apaprently effective that it is worthy of notice. He took a large, thick test-tube, made of the hardest potash glass, whose melting point was

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at an extraordinary high temperature. Into this he poured, while in a liquid form, a much softer glass, whose melting point was at a comparatively low temperature. Allowing the liquid glass to cool gradually, it formed a solid mass with the tube. After attaching a suction piston to the mouth of the test-tube, the whole mass was slowly heated for about thirty hours. At the end of that time the softer glass became liquid again, while the tube still remained solid. By forcing the piston outward the greater part of the molten glass was expelled. Enough was *allowed* to remain at the mouth of the tube to seal it by cooling in that position. Back of this stoppage there was left a space where there had never been the least quantity of gas, hence a complete and perfect vacuum.

An exchange says that the physical deterioration of the British people still occupies some of the attention of a Parliamentary committee. Many causes have been alleged for this condition, from the use of soap and the cold bath to alcoholic excess and the consumption of too much meat. The committee now propose to measure and weigh every person in the land in order to determine in the future whether the tendency has been continuously toward a decline of stature and strength. Also it is proposed to adopt the American system of instruction in the primary schools as to the delerious effects of alcohol and tobacco on mind and body. That there is still a diversity of opinion among experts as to the effects of alcohol and tobacco (in moderate quantities) on the system has not deterred the Americans from adopting text-books which make the most positive affirmations on this subject. Many men of science vehemently oppose the doctrines of these public school text-books. The English will start with the firm belief that both tobacco and alcohol are everywhere and always bad. They confidently expect to find that the children of smokers and drinkers fall below the average stature and intelligence of the children of total absainers. The results of investigation may confirm their opinions, but it is just as well to be prepared for a disappointment.

An exchange commenting on a medicolegal point says: "In trials for murder the point has sometimes been raised by the defense that death had not resulted from the wound inflicted by the accused, but from the subsequent surgical treatment, and that this should be considered in mitigation of the crime. We have the converse of this view in the case of the woman who stuck a knife into a man's heart and has been in jail awaiting the result of his injuries. By all the laws probably the

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man ought to have died. The wound was of a kind generally recognized as fatal. But the surgeons got hold of him, sewed up his heart, and in due time he recovered. Thereupon the woman was discharged from custody, and the man, in the exuberance of his delight, declares that she shall not be prosecuted. Some curious questions, moral, ethical and legal, are raised by this extraordinary occurrence. How far was the degree of guilt or innocence which attached to the woman's act affected by the degree of perfection which surgery has attained? A few years ago a man so wounded would surely have died, and the person who inflicted the wound would have been convicted of manslaughter at least. Now the surgeons by a rare chance saved his life, and as nobody is the worse off, no penalty is incurred. Are we to regard science as the handmaid of crime? And suppose the surgeons had failed, who would have been responsible?"

The attention of the profession is invited to the Hygeia Hospital and Sanatorium at Richmond, Va., which institution is personally conducted by Dr. J. Allison Hodges for his private patients. Dr. Hodges is another North Carolina doctor who has made himself felt in professional circles outside of his native State.

Broadoaks Sanatorium, Dr. Taylor's private hospital at Morganton, is being enlarged by the addition of 11 rooms. This institution has met with marked success from the first and has had to turn away patients by reason of all its rooms being full. Hence the enlargement. The new rooms will be furnished, heating apparatus all in, ready for patients by November 1st.

What a lovely thing is the gratitude
Of the patient saved from pain;
For the labor we do for the sick and weak,
Our labor of hand and brain.

What a wealth we have for our daily work,
For those who are sad and ill.
How sweet to the ear is the grateful word—
Until we present the bill!

—*Exchange.*

Gratitude.

Physiololgy in Our Public Schools.—A school-teacher at Port Allegheuy, N. Y., the other day received the following note: "My boy tells me that ven I trink beer der overcoat vrom my stomach gets to thick. Blease be so kind and don't interfere in my family affairs."—*Journal Med. Science.*

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A Difficult Question hitherto has been raised by the existence of a few regions where notwithstanding the presence of the anopheles mosquito and of conditions favorable to the disease, no malaria exists. Doctor Schoo in India has found an explanation of this anomaly in the fact that it is extremely difficult to infect mosquitoes with the malarial parasite as long as they feed on acid fruits. A similar observation has been made in Italy by Professor Celli, who says that one of the areas where the anopheles mosquito fails to convey malaria is remarkable for an enormous development of the cultivation of the tomato, which is an attractive food to mosquitoes.

Health of College Girls.—Dr. Mary E. Ritter has made a careful study of school girls and college women in the University of California, and finds that many improve after leaving high school—that is, college life agrees with young women who take their studies seriously and rationally. A college education does not, therefore, necessarily injure the health of women. The seeds of subsequent ill health are sown at an earlier age and are not the consequence of study. The causes of ill health are mainly traceable to unhygienic living or the sequence of infectious disease. In a large proportion of women students college life, with the the mental stimulus of a purpose, improves their health and fits them to become better disciplined and more intelligent mothers. More careful observation on the part of physicians and instructions to parents, she thinks, would, to a large measure, improve the existing unsatisfactory conditions.—*Am. Jour. of Surg. and Gyne.*

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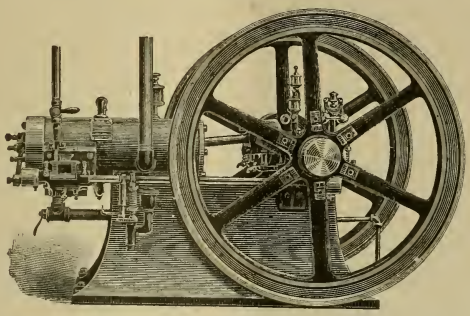
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Radium and the Sun.—Prof. George H. Darwin suggests that the discovery of radio-activity renders it possible to increase the estimated age of the sun, and the period during which it will continue to furnish light and heat to the earth, from 10 to 20 times. Thus, instead of being 100,000,000 years old, the sun may be 1,000,000,000 or 2,000,000,000 years old, and its future duration may be 100,000,000 or 200,000,000 years in place of 10,000,000. Knowing as we now do, Professor Darwin says, that an atom of matter can contain an enormous store of energy in itself, we have no right to assume that the sun is incapable of liberating atomic energy to a degree at least comparable with what it would liberate if made of radium.

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(*Alk. Clinic.*)

Alas for the insecurity of human hopes. I had printed a number of copies of the following "pome" (which I found in the *American Druggist*, fondly hoping it would stimulate some of my recalcitrant patients to the remitting point. The appended reply shows how cruelly this hope was nipped in the bud:

"If I should die tonight—
And you should come to my cold corpse and say,
Weeping and heart-sick, o'er my lifeless clay;
If I should die tonight—
And you should come in deepest grief and woe,
And say, 'Here's that $10 that I owe,'
I might arise in my great white cravat
And say, 'What's that?'

If I should die tonight—
And you should come beside my corpse to kneel,
Clasping my bier to show the grief you feel;
I say, if I should die tonight—
And you should come to me, and there and then
Just even *hint* 'bout paying me that ten,
I might arise awhile—but I'd drop dead again."

I shall *not* die tonight,
But shall live to see another day,
When to my lawyer I shall say:
"I did not die last night,
So hunt that patient with your tongue and pen,
By day and night and get that *ten,*
And if you get it, *then, oh then,*
I'll gladly die—some other night."

Prayerfully submitted for your consideration by DR. G. A. TROTT.

"*Dear Dr. Trott:*
I have just received your letter,
In which you say you'll die, if I don't
pay you better,
I sadly sigh, and note with tearful eyes,
Your fearful threat from death's cold
arms to rise,
Like Banquo's ghost, historic and all
that,
Adorning yourself in your great White
Cravat,
Oh, Dr. Dear, while my poor tears
amount,
I pray that you don't do this on my ac-
count.
I know 'tis hard in this poor mundane
sphere,
To give up money without many a tear,
But crying's cheap, and many a better
pen,
Has wasted ink, in trying for that
"ten,"
A better way would be to hush your
grief,
And purge some other one, to get your
soul's relief,
But if you sleep, until I come to pay,
You'll not wake until the judgment day.
"I shall not die tonight"—Oh, Doctor,
this is better,
And gives me relief, even while I write
this letter,
I'll wait with patience, while your law-
yer camps,
On my poor trail, and nobly wastes his
stamps,
But if he proves, to me a vexing
"sport,"
I'll take my troubles to a bankrupt
court,"
And clear my skirts from all the motley
crew,
By paying thus, to all, the debts I'm
due."

Prayerfully and affectionately,
A TAKER OF YOUR PILLS.
G. A. T.

Nature and Science.

A second specimen of the African quadrupped known as the okapi, discovered by Sir William Johnston, has been secured by Mr. Walter Rothschild for his extensive zoological museum at Tring (England). A special expedition was organized in Central Africa to secure a specimen from Congo Forest, dead or alive. That which has been received by Mr. Rothschild is the skin and skull of an adult okapi.

A Russian doctor named Loudon, of St. Petersburg, has published some interesting observations relative to the action of the Becquerel rays on the nervous system and on the eye. He found that when a box containing bromide of radium was placed in a cage in which mice were kept the animals became paralyzed and comatose, and died in five days. He also found that persons who are either totally blind, or have only the feeblest possible perception of light, are peculiarly sensitive to the Becquerel rays, and are able to form visual conceptions of the contour of objections the shadows of which are shown on a screen by means of the rays.

Light from the Human Body.—It is announced in the papers that Prof. Arthur W. Goodspeed, of the University of Pennsylvania, has succeeded in taking photographs by light emitted from the human body. These rays seem to be secondary disturbances caused by allowing the radiation from a Crookes tube to fall on the body; but care was taken to avoid confounding direct or reflected rays from the tube with the body rays. Says *The Sun* (New York):

"Professor Goodspeed pointed out

that all matter absorbs radiocative energy in waves of varying length and emits this same energy in waves of a definite and altered length. The energy that has thus been transformed is characteristic of the matter from which it emanates. The rays or waves of this energy are given out by the human body with comparative force and freedom.

"The Crookes tube enabled Professor Goodspeed to make his discovery by its production of exaggerated wave conditions and their consequent absorption and diffusion with unusual force by the human body. In making his experiment he did not permit the x-rays emanating from the Crookes tube to flow toward the photographic plate, and the unusual wave disturbance created in this way was absorbed by his own body.

"Professor Goodspeed also ascertained by experiments that the rays from the human body pass with difficulty through a glass and with ease through aluminum."

It is also suggested by Professor Goodspeed that the rays given out by different persons may be different and in some way characteristic of their sources, so as to furnish a new means of personal identification.

"The Hour-Hand of Eternity."—In a recent lecture at Berlin on the new views of the constitution of matter based on the phenomena of radium and other substances whose atoms appear to be flying to pieces, Sir William Crookes said, "This fatal quality of atomic dissociation appears to be universal, and operates whenever we brush a piece of glass with silk. It works in the sunshine and raindrops, and in the lightnings and flame; it prevails in the waterfall and the stormy sea, and although the whole range of human experience is all too short to afford a parallax whereby the date of the extinction of matter can be calculated, protyle, the 'formless mist,' once again may reign supreme, and the hour-hand of eternity will have completed one revolution."

Birth of the Elements.—It is an old question, "Are the 70 odd chemical elements really elementary, or are they compounded of something still more elementary?" In the light of the recent discoveries about radium Prof. F. W. Clark recurs to a theory, advocated by him many years ago, that as the planets were evolved out of the original nebula which gave birth to the solar system, the chemical elements themselves were also evolved out of something far less complex than themselves. The fact that existing nebulæ are very simple in composition, while stars in various stages of evolution exhibit more and more complexity, until, in solidified bodies, like the earth, a great number of chemical elements with a myriad of compounds are found, is regarded as strongly supporting this theory. The phenomena of radium lead to the additional suggestion that as in the development of the heavenly bodies we seem to see the growth of the elements, so in radio-activity we witness their decay.

Becquerel Rays and the Blind.—The London *Lancet* describes some interesting observations by Doctor Loudon, of St. Petersburg, concerning the action of the Becquerel rays on the eye. He found that persons who are either totally blind or have only the feeblest perception of light are peculiarly sensitive to these rays, and are able to form visual conceptions of the contour of objects whose shadows are thrown upon a screen by means of the rays.

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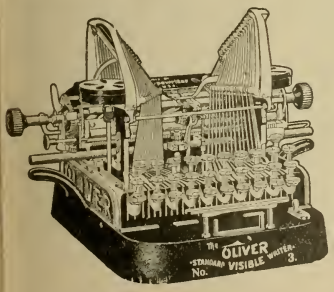
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Still More Strange Rays Discovered. Not long ago R.Blondlot, of the French Academy of Sciences, discovered that invisible rays, capable of penetrating solid substances, are given off from the incandescent mantles of the Welsbach light. More recently he has announced the discovery of similar radiations from an ordinary Argand burner and from a sheet of incandescent silver. The rays from polished silver are polarized, but when the silver is covered with lamp-black the polarization disappears.

A Great Man's Brain.—At a meeting of the Anthropological Society of Washington in May, Doctor Spitzka described his studies of the brains of 97 eminent men, including that of the late Maj. J. W. Powell, director of the Geological Survey. He pointed out that Major Powell's brain exhibited a decidedly superior degree of development, and its weight, 1,488 grams, was above the average of the 97 brains under consideration. There was a special development of the association area on the right side which might not be unrelated to an important characteristic of Major Powell's mental make-up, that is, keen observation and superior powers of generalizing. Prof. W. J. McGee thought Doctor Spitzka's address showed that it is now possible to trace a definite relation between cerebral structure and the physical character of an individual.

Curious Effect of Tornadoes.—One of two remarkable examples of the effect of the sudden expansion of air inside buildings when the partial vacuum produced by a tornado passes over them was noticed in the storm that devastated Gainesville, Georgia, last June. The walls of a mill were blown outward, and the roof was lifted into the air and suspended there for several seconds. A stand-pipe 40 feet in diameter and 50 feet high, placed 50 feet above the ground, lost its sheet-iron cover, which weighed several tons. It was lifted

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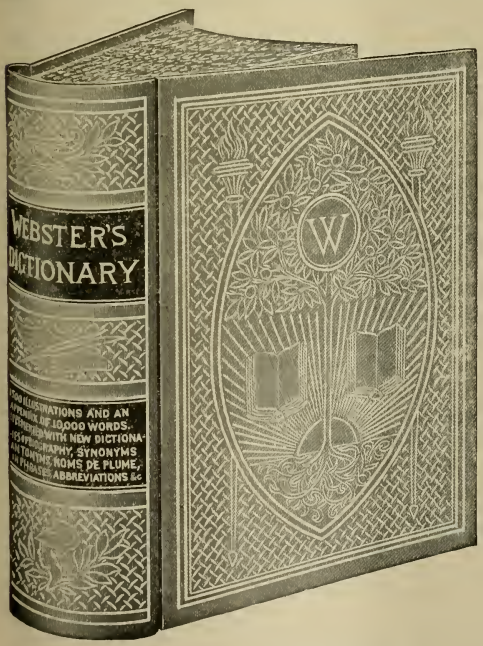
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Patent Index

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bodily off, carried high into the air, and dropped 100 feet away. In its fall it killed several persons.

Prof. M. W. Wright, who holds the chair of anatomy at Birmingham University, has made an interesting investigation, says the *Revue Scientifique,* of the teeth and jaws of a series of prehistoric skulls from Yorkshire. "These belong to two types; there are 47 of the Neolithic and Bronze ages and 20 others belonging to the early part of the Iron Age. These last are principally dolichocephalic (long-headed), and very probably Teutonic; the first are principally branchycephalic (short-headed), and must belong to the Celtic Iberian races, pure or mixed. Both are noticeable for their excellent condition as regards the number, regularity and condition of the teeth. With the skulls of the Bronze Age, the teeth are generally complete and perfect. Only one has a decayed tooth, but in four of them are found signs of alveolar abscess. In one of them have been found signs of complementary or supernumerary teeth. The second inferior molars seem to be invariably quadricuspid and the canine fossas are generally very deep. One lower canine was bicuspid, an anomaly very frequent in prehistoric man, but rare in modern civilized races."—*Translation made for The Literary Digest.*

"Two University of Michigan students stood in a darkened laboratory recently," says *The American Inventor,* "holding an electric-light bulb between them, like a water-pail. A college professor pulled a lever. The electric bulb suddenly lighted the room, showing an audience—who gazed in amazement at a human electric wire—the arms of the two students through whom the current ran. . . . The students grasped in their hands a short, naked wire, at the center of which the incandescent lamp was suspended. Then with their free hands the boys gripped the broken ends of the 500,000 volt wire and the current which lighted the lamp completed its circuit through their arms. Prof. B. F. Bailey explained the apparatus through which so strong a current of electricity was made harmless. It was a 'step-up' transformer. The fatal current had 240 alternations a second; this new current 800,000 alternations. The current had been transformed from 5,000 to 500,000 volts, and was now harmless."

The discovery of a new food-substance that stimulates the rapid growth of the organism is announced in the daily press. This substance, we are told, has been named lecithin. Its qualities, according to a correspondent of *The Sun* (New York), "have just been demonstrated by a series of experiments by Dr. Shinkishi Hatai, professor of neurology at the University of Chicago. Dr. Hatai experimented with white rats, and by feeding them lecithin made them grow 60 per cent. faster than they grow ordinarily. This was under conditions of atmosphere and general surroundings that were unfavorable. The scientific men say that lecithin will have a similar effect on human beings. Lecithin, according to the definition given by Dr. Hatai, 'is an organic, phosphorous-containing body found in eggs, brain matter, and the white corpuscles of the blood.' The professor's experiments show that the growth induced by lecithin is normal and healthy. It stimulates all parts of the body exactly alike, thus acting unlike other stimulants."

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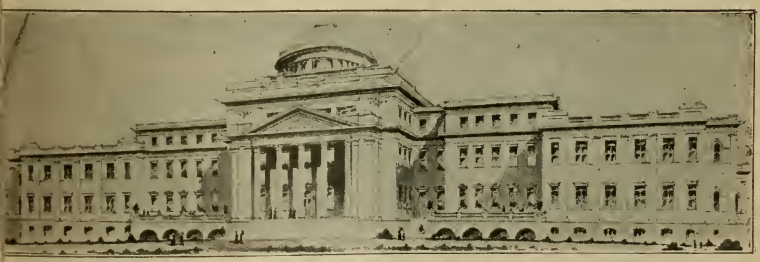
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ORIGINAL COMMUNICATIONS.

Report of Cases.

Abdominal Pregnancy with Retention of Fœtus Nine Years—Uncontrollable Diarrhœa Existing Three Years, Evidently Due to Foreign Body in Bowel.

By C. M. Strong, M. D., Charlotte, N. C.

Case 1st, Mary N. (col.) aged 32, was referred to me by Dr. McCain of Lancaster, S. C., for supposed dermoid cyst. She presented herself at the Good Samaritan Hospital in a condition of great emaciation. Inspection revealed an abdominal tumor with its center near the umbilicus. Deep fluctuation was elicited, and a small opening in the abdominal wall near the umbilicus gave vent to pus, hair and at times to small pieces of flesh of a most disgusting odor.

History.—Ten years previous she missed her menses for nine months. At the third month she fainted in the field when she was at work, and was confined to her bed suffering severe pains for three weeks. After this there was a progressive enlargement of the abdomen and pregnancy was suspected, fœtal movements often occurring. She was confined to her room most of the time and at nine months pains set in with some discharge from the uterus. Physicians were called and a diagnosis of abdominal pregnancy made ;operation was advised and refused. After the lapse of three months during which time she was confined to her room, she resumed her occupation as a field hand, making a good one for eight years with a lapse of one during which she was sick. During all these years she was in poor health but managed to do a full hand's work.

One year ago the opening at the umbilicus occurred and the discharge has been continuous. Owing to her extreme emaciation and weakness operation measures were feared, but after explaining the danger of her condition she consented to the operation, although only meagre hopes could be held out to her. After a few days of preparation I operated assisted by Drs. King, Mon-

Read before the Mecklenburg Co. Med. Society at its September (1904) meeting.

roe and Gibbon.

On opening the abdominal cavity a most horrible stench was given off and we found a full term child undergoing putrefaction and calcareous degeneration. The weight of the child was 18 lbs. due to the deposit of lime salts. Dense adventitious membrane half an inch in thickness shut the child off from the other contents of the abdominal cavity. Two openings existed in this membrane; one leading to the left ovary which evidently was the tract of the foetus, the other leading to the opening at umbilicus; this evidently let in the pyrogenic bacteria producing the suppuration, otherwise I think, complete calcification or would have been formed. No attempt was made to dissect out the sack, but it was curretted and packed. The subsequent discharge was very large in amount; for three weeks she improved in condition, but an opening occurred into the peritoneum by sloughing and a very violent peritonitis followed. She succumbed to the strain after making a heroic fight for life. I report this case not to show any skill in operation, but for its uniqueness.

Case 2.—Mrs. C., aged 30, accompanied her tuberculous husband to the plateau of Mexico three years ago remaining nine months. Previous history: Health excellent. While there she contracted a serious diarrhoea which could not be controlled by her physician. He called her trouble lienteric-amoebic—tubercular-enteritis. She came home extremely emaciated, no elevation of temperature, no sweats, very little pain. Every day was a repetition of the preceeding. On rising a copious, sour, rice water discharge followed by some mucous would occur and every two or three hours during the day this would be repeated until exhausted, she would seek her bed, when the diarrhoea would stop. This continued for three years up to a week ago. She had improved considerably in health and the diarrhoea was not so severe, but it persisted. I treated her for two years with absolutely negative results. The whole gamut was run, first up the scale, then down again. Diet had absolutely no effect; except when she ate everything she improved, her digestion seeming to be perfect. Examination showed clean tongue, no soreness, tympany or enlargement of bowel or stomach. No nodules or thickened bands, Microscopic examination of dijecta was nil, no amoeba, no hard warmspores, no typhoid baccili, no pus germs, only colon baccili. Opium had no controlling effect. Putting her to bed alone seemed to do good. I simply was "up against it." and finally did not attempt treatment. One week ago I was hurriedly called to see her and found her suffering with excruciating pain in the rectum. She made this statement: "Doctor, I have a bad case of internal hemorrhoids; did not send for you for the diarrhoea, but I want you to examine me thoroughly and if necessary operate on me." I made a digital examination and between the sphincters found a sharp object. On dilating the sphincter I saw a triangular object which with some difficulty and excruciating pain I dislodged and extracted. It proved to be a piece of bone triangular in shape with bevelled edges and apices sharp as a pin's point. Its base measured $\frac{1}{2}$ inch, its length $\frac{3}{4}$ inch. Its extraction was followed by some hemorrhage. Its point of lodgement in the bowel had the appearance of an ulcer with edges of exuberant mucus membrane. This was touched with carbolic acid and sedative suppositories

were left to be used at night, followed by saline enema. Since then her bowels act only once daily and the fecal matter is natural. She has had the piles—as she terms it—for the past nine months and during that time her diarrhoea has been better. I show you the piece of bone. The points of interest in this case are, absence of pain and blood except during the last few months; absence of digestive symptoms; also absence of any specific cause, together with the apparent cure by the removal of the bone. It seems pretty clear to me that in its transmission through the small intestines it took two years, during which time it produced the serious discharge characteristic of small intestinal irritation, and that during the last nine months it has been in the larger bowel causing dysentery symptoms and other symptoms which were thought to be due to piles. It also explains why all medication was of no value.

A Few Words on Tuberculosis*

By Dr. J. F. Swann.

Mr. President and Gentlemen:

Is it incumbent upon the physicians of Person County to take any special action toward the Great White Plague other than what is being done? It is self-evident that so far as our efforts to combat this terrible disease are put forth in a rather desultory way, hence does not amount to much; and yet by a mere casual reflection by any observing practitioner, it is evident that there is a crying need for something better. What are the facts?

It is the writer's observation and experience that no other disease in our midst carries off so many of our people.

In the October North Carolina Board of Health Bulletin are reported 36 deaths from consumption; 29 from diarrhoeal diseases; 19 from heart disease, and 14 from typhoid fever. Out of a total death list of 246, thirty-six are reported to be due to consumption. According to these figures, a little more than one out of seven died from consumption. In our own county we have no means of getting at the figures, neither has the writer kept an accurate account in his own practice. But we believe it is even more with us.

It is generally accepted as a fact that Tuberculosis is due to a germ, the Bacillus Tuberculosis; and, without which there is no such disease. But it is not essential to this paper, that the writer follow out in detail the germ theory of tuberculosis. We are all more or less familiar with it. The question is, do we accept it as true in our practice? If not, then why not?

We quarantine against smallpox, We are careful to disinfect after typhoid fever, and a number of other diseases. The state has recognized and favored these practices by law, hence today, these diseases do not kill in numbers like tuberculosis kills. Neither do they produce the suffering and want, which is caused by tuberculosis, to say nothing of the cost or expense. And yet, how often does tuberculosis put in its deadly work, as it were, in the very prime of a useful life—useful to state as well as to community and self. And with these facts plainly before us today, what is the attitude we assume regarding it? A few of our advanced thinkers are at work, but what is *our* attitude?

So far as preventing the disease from being conveyed to others, we are practically doing next to nothing. The tu-

*Read before the Person County (N.C.) Medical Society.

bercular subject literally lives and dies among us with practically no care for the safety of others. Our remedial work with the subject does not show very flattering results as yet. Both among physicians and laity, there is too much of an air of resignation to fate. Can't we as physicians be a little more professional here? Can't we as professional men, take the initiative and make one concerted move in an honest effort for the better condition of our county in this respect? We can hardly expect an intelligent first move on the part of the laity.

In fighting tuberculosis, let us assume something of the spirit with which we fight typhoid fever, or diseases of like character. It is true that the difficulties are many and great, and in the beginning there must needs be many errors. But, with energy and patience long continued, who dare say, that the result may not prove very desirable, if not glorious. And here, gentlemen, it seems to me that it is very important to present a united effort. One man alone can do but litttle. There are a few erroneous ideas, too deeply rooted in the minds of the laity, for the undoing by one man. Then what shall we do? Here the writer may offer only a few modest suggestions, and perhaps find later that more or less of them were wrong.

The *ideal* may be to destroy all tubercular germs and restore all tubercular subjects to their wanted health. But this we cannot hope for in a day. Neither may we expect the county to build for us a commodious sanitarium, in which to place all tubercular cases at this time. Perhaps we might make a beginning, but at first, our work must needs begin in the smaller details. Perhaps our first effort should be directed towards the work of a general education of the people. How would some free literature setting forth the nature of the disease, the importance of early attention, wisely directed, etc., do? Would it not be a well-paying investment?

In tubercular troubles, the ignorance and also the wisdom (?) of the general layman is very appalling. Mark my words, *Ignorance* and *wisdom*...Ignorance of the things they should know and the false wisdom, which they possess to their own hurt. It is wonderful as well as sad to note the attitude of the layman here. He knows that he has a bad cold and so pins his faith to some patented nostrum because it is advertised and advocated to "cure everything or money refunded"; but the poor fellow's time and opportunities are never refunded. Or it may be that he half-way commits himself to the care of a physician, and because he is not well or cured in a week, he attributes some mercenary motive to the physician, and so stops and flops over to something else.

Another poor fellow knows that he has "lung trouble," and also knows (?) that doctors can't do him any good. And so he drags on until his last hours, when his friends and relatives have the privilege of calling in a physician, "just as a matter of satisfaction," that the community may charge up another failure to "doc."

Another finds himself losing flesh and strength, and so pins his faith to *whiskey*, probably with now and then a little bitters mixed in. And thus he will either be cured or he will begin to shape his coffin.

Another would go to a physician for advice, but he is rather mysteriously improving all of the time, and so does not care to go to the needless expense and trouble. Others will soon be cured by

shutting the doors, shading the windows, and chinking the cracks. And into this foul germ-laden air of a den, invite all sympathetic friends to call.

But, gentlemen, these and other conditions are familiar to all of us, and they argue much in our minds for a movement for an educational effort on our part.

But another trouble confronts us. The layman understands that all consumptives must die, and for a physician to pronounce a case tuberculosis is to invite one of two things. Either his own death or that of his patient. Then how are we to instruct our patients as to habit, disposition of sputum, etc.?

Again, unfortunately some smart Alec lives to tell the tale of how he lived and mixed with sick coughing folks and never caught it, hence he now knows more than the physician. But with a patient, energetic, concerted move, we may overcome many of these difficulties.

But again, tuberculosis among the poor gives rise to one and by no means the least perplexing questions to the physician. So often we find a case of tuberculosis in a family consisting of several members while their home consists of but one room, poorly arranged and kept, and with all a poor diet, and very likely, still more poorly prepared. Brother doctors, the responsibility is upon us; what shall we do?

Not long ago, the writer was called to treat a case of pulmonary tuberculosis in a mother of six children, all boys, and some very small. They occupied one room; and in this condition it did not take the disease long to run its course to a sad end. A little longer ago, we were called upon to treat a severe case of pneumonia, in one of our worst spells of winter weahter. This time the family occupied a small house, with one fire place, and room, plus a loft, and with all this they housed at the same time a tubercular case. The result was, that the pneumonia case died some six or eight months later with tuberculosis.

But the writer presumes that such experiences come to us all. We are all familiar with them, and when they come we excuse ourselves with the thought that we do the best we can under the circumstances. But so long as the poor are thus poorly managed, so long will tuberculosis remain a menace to our public health. And if relief comes, we as physicians, must make the first move.

As a preventative our people need to be a little more careful in their habits of diet. The well nourished individual is not so often a victim of tuberculosis. But often when we are called upon to treat a case, we find the question of diet a very troublesome one. Our people need to be instructed as to what to eat, especially how to prepare it, and to ingest it properly. It is not so much a question of poverty with our people as it is a question of skill and care. The stomach is abused by ingesting too much of improperly prepared food. Sometimes our patients date the beginning of their trouble to sometime when they were indiscreet in their diet. And now for a term by which the writer may correctly express a condition (?) in which people are probably most at fault. Somewhat like the term "malaria" of old, do we use the term "constitution," and qualify it with adjectives like bad, broken, run-down, feeble, etc. What is it? Sometimes the writer is persuaded to call it "Wasted nerve force." How often do we see the nervous element play so conspicuous a part in the condition of our pa-

tients? Sometimes it appears to be inherited, at other times acquired. But, at any rate, "Be a little more conservative with your nerve force," would be good advice in many cases.

Note the conditions at the cotton factories today—long hours of hard work, away from fresh air, and sunshine, and all that would invigorate the nervous condition.

Frequently, after a spell of sickness, La Grippe, etc., for lack of sufficient care, and rest we have tuberculosis set up. Hence let our people assume good, sane habits of regularity and reason, and not presume too much upon the kindness of a long-forbearing nature, and in their hour of weakened resistance, let them be a little more watchful and careful in guarding against the foe. And to this end, let the physicians unite in patient labor.

Some Remarks on the Diagnosis of Typhoid Fever.*

By Greer Baughman, M. D., Richmond, Va., Lecturer on Hygiene; Demonstrator of Hematology and Physiology, Medical College of Virginia; Member Richmond Academy of Medicine and Surgery, Medical Society of Virginia, Southern Surgical and Gynecological Society, Etc.

Typhoid fever, like the poor, is always with us; but beginning with the month of August, it makes itself more noticeable on account of the number of its victims. With the exception of pulmonary tuberculosis, no disease is more discussed than that of typhoid. This discussion has made the diagnosis and course of the disease a subject of household talk among the laity. So much so that the patient has oftentimes made the diagnosis of typhoid even before calling in the doctor. This very fact serves to put the physician on his mettle, and makes him all the more anxious to come to a correct diagnosis.

It is not the purpose of this paper to enumerate every sign and symptom that might lead to a correct diagnosis, nor to explain in full all of the laboratory methods of examination, but rather to pick out the more salient and newer methods that are important in the early diagnosis, and leave to the discussion many important points.

Among the *clinical signs* that aid in diagnosis, the prodromal symptoms of lassitude, headache, nausea, loss of appetite and epistaxis should not be neglected. These usually precede the patient's going to bed and the beginning of the first week; but it must be borne in mind that typhoid patients often walk around attending to their duties, whe nthe fever is quite high.

The temperature of typhoid is so characteristic, particularly in the first week of the disease, as to be of great value in the diagnosis. The temperature rises in the evening and falls in the morning, but in a way that both the morning and evening reckoning are about a degree higher than the day previous. This continues until the temperature has reached about 103° F., where it usually stays with daily oscillations, low in the morning, high in the evening, until the period of decline by lysis about the end of the third week. Besides this characteristic temperature curve, a test that is made in almost every case is the administration of quinine which has but little effect on the typhoid temperature.

While the pulse of the typhoid patient is hardly as characteristic as the temperature, still some points may be gotten from a careful examination of it, particularly with the sphygmograph, that will aid in the diagnosis. The pulse is increased in frequency almost

*Read before the Richmond Academy of Medicine and Surgery, July 26, 1904.

always, but usually it is not increased sufficiently to correspond with the temperature. In character, it is quick, vibratory and compressible, not hard or resisting. The relaxation of the artery wall may be so considerable as to cause dicrotism. This may be shown readily with the sphygmograph, but usually the well trained finger will detect it. Dicrotism may occur, however, in any anemia, long protracted illness or where the artery walls are relaxed.

As most of the pathology of typhoid fever is found in the digestive apparatus, we would naturally expect to find changes from the normal there, as the earliest and most persistent of all symptoms. We usually begin by having anorexia accompanied by constipation and a coated tongue. When the patient takes to bed, the constipation has been succeeded by a diarrhoea, sometimes accompanied by vomiting—almost always in children. Later on, the tongue may be coated with a thick fur, but red on edges and tip, parched and fissured, while the teeth are covered with sordes. This does not occur, however, if the patient is watched by a careful nurse.

The diarrhoea is not considerable, as a rule. Hemorrhage from the bowel may occur in the latter part of the second or third week of the disease, and is looked upon as a confirmatory diagnostic point. Tympanites, tenderness or pain and gurgling on pressure, particularly in the right iliac fossa, are very constant symptoms, which are largely used in aiding the diagnosis. The ochre or pea-soup color of the stools are likewise of help.

Physical examination should never be omitted in the case of suspected typhoid. A slight bronchitis is commonly detected in the very beginning of the disease. It may be so considerable as to lead to an incorrect diagnosis. But the other symptoms rapidly develop to prevent the physician making that mistake. Towards the end of the first week, the spleen becomes very noticeably enlarged, so that later on, it can be felt.

One of the most important, if not the weightiest objective signs that may be made out by inspection, are the rose spots on the chest, abdomen or back. According to Osler, we may look for them from the seventh to the tenth day of the outbreak of the disease. Not only are they of importance in the diagnosis of typhoid fever, but they are the most certain means we have of ascertaining the stage of the disease.

The date the patient takes to bed depends so much on the personal equation, that it is not reliable in ascertaining the beginning of the disease. The temperature curve is not always characteristic; but the rose spots almost always present between the seventh and tenth days, and may be depended upon to reckon from. Dr. Gibbes believes they can be photographed before they are seen. The fact that they are small and may be overlooked, should stimulate the careful physician to constantly inspect the patient's trunk for these important papules.

On the side of the nervous system, the subsultus tendinum, (which is noticed when one feels the pulse) and the hebetude, indifference, inanimation, are often marked. If the question "How do you feel?" be asked a typhoid patient, he will often, not answer for a minute, and then say in an inanimate voice: "Right well."

Of recent years, the laboratory has been employed in the diagnosis of typhoid, both chemically in the detection of new formed elements in the urine (found by Elrich's diazo reaction), as

well as by the detection of the bacilli in the urine, in the mouth, in the feces, blood, spleen and rose spots; also by the agglutinating power the blood serum of typhoid patients has upon a virile culture of typhoid bacilli.

The chemical examinations of the urine have fallen somewhat into disuse of late, or rather, have been pressed aside by more certain bacteriological experiments. The New York Health Department found Ehrlich's diazo reaction in over 90 per cent. of cases, usually as early as the third to the sixth day. Johnson reports it present in 80 per cent of 782 cases of typhoid examined; also in 46 per cent. of 309 cases of tuberculosis, 18.9 per cent. of 90 cases of pneumonia, 26.2 per cent of 42 cases of malaria, and 23.9 of 46 cases of erisypelus.

Simon found it present in 95 per cent of 64 cases of typhoid, and states that it is usually present as early as the fifth or sixth day may persist into the third week. Except in children, its absence from the sixth to ninth day is indicative of a mild attack. When the reaction is present after the third weeek, he is inclined to suspect tuberculosis. It must be borne in mind that the diazo reaction is present likewise in severe scarlet fever, measles, acute miliary tuberculosis, malaria, erysipelas, pneumonia, carcinosis. It is of value as a confirmatory diagnostic point, but cannot be relied upon as positive.

Morse says that the bacilli may be found in the urine of typhoid patients in from 20 per cent. to 30 per cent. of the cases. He is of the opinion that they may be found in the urine in 25 per cent. of the cases after the fifteenth day, almost always accompanied by albumin. It is rare to find the bacilli before the second or third week, and they are always, according to many observers, accompanied by albumin. The isolation of typhoid germs may be accomplished without much trouble by the method of Piarkowski, in twenty-four hours.

The detection of typhoid germs in feces is as easily done as that in urine, and it is accomplished with greater certainty. Probably the most certain method of isolating the typhoid bacilli from the feces is that of Hiss which requires first, the dilution of feces in broth, the inoculation of this diluted matter into a special plating medium. If characteristic colonies appear from 10 to 24 hours, they are transplanted to a special tube culture. Positive results can be gotten by the Hiss method in from 36 to 40 hours.

An observer examining by the Hiss method, found positive results from feces in 20 out of 21 cases; while the Widal was positive in only 18. The average day for positive isolation was the tenth; that of positive Widal, the twelfth. The earliest day of isolation was the sixth. Morse reports to have found typhoid bacilli in stools three days after the patient took to bed. Hiss states that 89.5 per cent. of isolatons from the feces was recorded in the New York Hospital. He thinks, however, that the germs do not, as a rule, occur in sufficiently large numbers to be isolated before the second week. Presson was able to isolate the typhoid bacilli from the throat and tonsil in six out of ten cases.

Although the germs probably do not grow in the blood, still they are carried from place to place by means of it. Consequently, we find the typhoid bacilli in the blood current, in the spleen and in the rose-spots. J. Hopkin Cole found the typhoid germs on the sixth day in the blood. In several, he found them before the Widal was present. Courmont found a positive result as

early as the fifth day. He drew 3 c.c. of blood from the median bacilic and diluted it in 500 c.c. beef broth and then plated it.

It is regarded as very important to use a large quantity of blood, well diluted.

E. Adler lauds splenic puncture very highly, claiming 90 per cent positive isolations from typhoid cases. He says it is positive even on the first day.

P. H. Hiss has found them in splenic punctures on the seventh or eighth day. He likewise says that rose spots frozen with ethyl chloride, after Richardson's plan, give the best positive results of typhoid isolation from them.

Policco and Gemelli isolated typhoid bacilli regularly from the roseola in fifty patients in early typhoid.

J. L. Monse states that rose spots almost invariably contain typhoid bacilli.

A blood count accompanied by a differential white count is of great service in the diagnosis of typhoid. During the febrile periods, the red cells show a slight and gradual decline. The concentration of the blood, however, due to diarrhoea, may make a slight increase in the red cells in the first two weeks. The hemoglobin is low in spite of the concentration of the blood.

In the first week of an uncomplicated case of fever, the leucocytes are normal in number. Acute inflammation any where in the body may give rise to a leucocytosis. In the second week, the leucocytes show a distinct reduction. In the third and fourth week, they continue to decrease until the fever begins to decrease; then they increase.

Usually in the first week the lymphocytes and the polymorphnuclear cells retain their normal relationship. Higby, however, reports nine cases in the first week, with increased mononuclear elements and decreased polymorphnuclear. After the first week, unless there is an acute inflammation, the mononuclear increase markedly, even reading 60 per cent. They seldom fall below 25 per cent. while the polymorphnuclear cells gradually fall, reading 60 per cent. to 65 per cent. in most cases. Eosinophile cells are usually absent, or very scarce.

The most reliable and constant laboratory method of determining typhoid fever is the Widal reaction. This method, first utilized by Widal in 1896, has come to be the most important of all laboratory methods of diagnosis. It consists in the clumping of a reliable boullion culture of typhoid bacilli not over 24 hours old, in the presence of blood serum, diluted 20 to 500 times, taken from a typhoid patient.

Park reports that 88 per cent. of hospital cases showed a positive Wida reaction sometime during the disease. Cabot collected 3000 cases of supposed typhoid, of which 95 per cent. gave the reaction at some time during their course; while in 2500 control cases not typhoid, 2 per cent. gave positive reactions. Simon says that in undoubted cases, the reaction is present in over 95 per cent. E. E. Smith reports that the reaction is frequently seen as early as the sixth day. But in the hands of most observers, it is seldom found before the fourteenth day.

The clumping of typhoid germs in the presence of serum is not pathognomonic of typhoid. With a dilution of 1 to 10, often normal serum will cause clumping; but even with higher, positive reactions have been occasionally reported in cases of septicemia, malaria, pneumonia, tuberculosis, otitis, influenza, typhus, meningitis, normal serum and chlorosis. Absolute certainty, according to Ewing, cannot be ascribed

to any test unless the dilution has been very high, not less than 1.60, with a time limit not more than 15 to 30 minutes. As the test is not usually present before the second week, the application to the diagnosis of early typhoid is very uncertain.

SUMMARY: For the diagnosis of typhoid in the first week, because it is then that the practitioner needs the diagnosis, we will have to depend upon the 1, history of malaise, anorexia, chance of infection, headache etc, 2, Temperature curve, which is right characteristic; 3, Pulse, (which is out of proportion to the height of fever), and sometimes dicrotism; 4, Tympanites, gurgling in right iliac, tenderness; 5, Rose spots at end of week; 6 Widal reaction; 7, Blood examination; Normal leucocytes, heightened mononuclear count; 8, Diazo reaction; 9, Isolation of bacilli from feces; 10, Isolation of bacilli from blood and rose spots, or splenic puncture when practicable.

Methods. Piarkowski's Plating Culture. Normal urine, sp. gr. 1020, to be collected for two days, when the reaction will be alkaline. Peptone, one-half per cent., gelatine 3.3 per cent, well cooked over water bath for one hour and filtered. The filtrate poured into tubes and sterilized at 100° C., for 15 minutes, and again, the next day, for only 10 minutes. Upon this medium, in 24 hours at 22° C., the colon bacilli appear as yellowish round with sharp edges; while colonies of typhosus appear as if threads were extending from the center.

Hiss' Plating Medium. Agar, 10 gm.; Gelatin, 25 gm.; Sodium Chloride, 5 gm.; Liebig's Beef Extract, 5 gm.; Distilled Water, 1,000 c.c. Final titration should show 1.8 per cent. acid, Phenolphtalein being the indicator. The typhoid bacilli on a plate from this medium gives small, light greenish colonies with irregular outgrowths and fringed threads. The colon bacilli are much larger and, as a rule, darker, and do not form threads. The typical colonies may be transferred to

Hiss' Tube Medium. Agar, 5 gm.; Gelatin, 80 gm.; Sodium Chloride, 5 gm.; Lieblig's Meat Exeract, 5 gm.; Glucose, 5 gm.; Distilled Water, 1,000 c.c. Final titration should show 1.5 per cent acid, phenolphthalein being the indicator. In this medium, the typhoid germs form uniform turbidity at 37° C., within 18 hours.

Treatment of Typhoid Fever.*

By Wm. S. Gordon, M. D., Richmond, Va., Professor of Practice of Medicine and Clinical Medicine, University College of Medicine.

Mild and atypical forms of this disease need little medication. Severe cases prove fatal at times despite every accepted method of treatment. All cases require rest in bed, fresh air, careful dieting, regulation of the secretions, sleep and good nursing. In general terms, a strict application of hygienic rules, and the usual means for preventing the spread of the infection are plainly indicated. Bearing in mind that no specific for typhoid fever exists, we must place the patient in the best possible position to render nature's resources effective.

At the outset, the confidence of the patient should be secured, and his apprehensions allayed. He should be told that he has a disease which must run its course, but which will be materially modified by his quiet acceptance of the inevitable, and an unquestioning willingness to cooperate with the physician

*Read before the Richmond Academy of Medicine and Surgery, July 26, 1904

and nurse. The sooner the patient gives up, becomes passive, dismisses his fears, doubts, worries and efforts to keep pace with his disease and his attendants, the sooner will he recover.

The nurse is supposed to be doing her part well. She has placed the patient in the uppermost and quietest room of the house, has provided a convenient bed, secured good ventilation, robed her charge in a single garment, and attended to everything else incumbent upon her as an assistant to the medical attendant. If she has omitted anything right, or committed anything wrong, the doctor should adopt appropriate measures.

If the patient's secretions are torpid and the tongue coated, a cholagogue will be beneficial. Calomel, ipecac and rhubarb make a good combination, and often remove a number of unsuspected gastro-intestinal irritants which have been adding to the fever. At the same time a simple diuretic and diaphoretic mixture will be useful. Neutral mixture, sweet spirit of nitre, and solution of ammonium acetate are reliable. If there be headache, ammonium bromide can be added. These drugs possess the additional advantage of counteracting, partly or wholly, the unpleasant effects of quinine when it is deemed advisable to employ this remedy for diagnosis or other purposes.

The treatment so far recommended is applicable to various fertile conditions in the first stages. When the typhoid condition is established, my experience has taught me to withdraw quinine. Large doses of this drug will frequently reduce fever of any kind; but its continued use in a fever which it does not abort and which it may aggravate by causing gastric nervous derangement is not advisable. The fewer drugs resorted to, the better for the patient. For the fever, some form of hydrotherapy will usually be sufficient. In the early stages, the coal tar products are serviceable, provided the heart be not too weak, and other measures fail. For excessively high temperature the cold pack, or tubbing, is my own preference. Fever should be reduced by measures based upon the physiological action of drugs adapted to the pathological conditions of the case, or to external measures which either take the place of medicinal agents or render their use unnecessary. The judgment of the physician must decide this point according to the idiosyncrasies of the patient, the action of the drugs, and other circumstances to which no inflexible rule can be applied.

The diet is a matter of paramount importance. Realizing that the stomach is probably as dry as the tongue and impaired in motor activitity, we must put into it a sufficient amount of the most assimilable food given at regular intervals. Ordinarily, half a pint of liquid nourishment every three or four hours, will be sufficient; while smaller quantities at shorter intervals are used when indicated. The food should be varied, and all the proximate principles represented.

When constipation exists, laxative articles of food, such as strained oatmeal gruel, animal broths, buttermilk and fruit juices come in well, while with diarrhoea, preparations of sweet milk with rice and arrow-root, for example, are indicated. When such a diet disagrees, or the digestive organs cannot handle it, the artificial and predigested foods serve a good purpose. When the tongue is dry and coated, dilute hydrochloric acid administered with the feedings is a valuable addition, and I have often seen it act promptly and well. Constipation and impaction

of the lower bowel are to be prevented. The bowels should be emptied once daily, preferably by enemas, but if this means is enefficient a mild saline, such as sodium phosphate, oil, or broken doses of calomel are practically harmless.

Diarrhoea, when excessive, can usually be held in check with bismuth, chalk mixture, dilute sulphuric acid, opium and other agents.

My own rule is to give intestinal antiseptics when indicated by fermentation, tympanites, or other conditions. Salol, guaiacol carbonate, turpentine, chlorine water, thymol and other drugs will be found useful.

Tympanites should be controlled. The remedies above mentioned can be employed. I am an unshaken believer in the efficacy of turpentine internally and externally. It works well in many ways, and is valuable when used in rectal injections. I once saw dangerous and painful tympanites relieved promptly with charcoal when other measures had failed. Emulsion of asafoetida by the rectum oftne gives relief, as does the passage of the high rectal tube. It should be borne in mind that tympanites may frequently be prevented or relieved by careful attention to the diet.

Sleep is as necessary for the typhoid patient as food. Some form of hydrotherapy usually suffices, but there are cases in which hypnotics are necessary. The bromides, sulphonal, trional, paraldehyde, chloral, hyoscine and opium are the main drugs upon which reliance can be placed. They should be used with discrimination and with as perfect an adaptation as possible to the condition present. Many a patient has been subjected to feeeding and recording of temperature during the night, who would have been far better off if allowed or made to sleep. In marked stupor, with danger to the respiratory centre, caffein will do good.

The pulse and the cardiac sounds give the indications for stimulants. Aromatic spirits of ammonia has its place. Alcoholics may be indispensable, and are especially useful with the feedings. The great value of strychnine is known, and digitalis may be required. Caffein, camphor, ether, adrenalin, and saline infusions may be required in profound asthenia from any cause.

Infection of the lungs, kidneys, gall tract and other structures ought to be looked for and treated according to accepted rules, modified or not, as the case may be, by the general therapeutic indications. Phlebitis calls for prolonged rest.

Hemorrhage from the intestines requires absolute rest of body and mind, withdrawal of food for some hours, if possible, and an opiate. Cold to the abdomen, ergot and astringents can be tried. Opium and acetate of lead are, in my opinion, the best drugs to use.

Perforation calls for surgical consultation or action, as does repeated shock from hemorrhage due to the erosion of a good-sized vessel. In these instances, circumstances must necessarily govern proceedings.

Convalescence requires close watching. Relapses will occur in a certain number of cases under any plan of treatment. As long as the tongue is coated, the intestines tender, or the pulse frequent, it is unsafe to let the patient up, or allow solid food.

So-called recrudencesces, which are sometimes late infections of the kidneys, bladder, liver or other organs require special attention and treatment directed to the exact cause. By so doing I believe that many morbid con-

ditions recognized some time after the patient is supposed to be well, could be nipped in the bud. The urinary tract, for instance, suffers oftener than we think. Cases regarded as mild may be followed by serious local disorders set up insidiously during the attack. It behooves us, therefore, in all cases to examine all of the organs systematically and thoroughly during the whole course of the disease, and the patient should not be pronounced well until we know, so far as it can be known, that all of the organs have been restored to their normal condition.

In certain cases, a little elevation of temperature persists after the limit for relapses, while no causce can be assigned. Such patients will frequently improve by getting them up, feeding them more generously, and removing them from their surroundings. Tonics also do good under these circumstances. Anaemia should receive attention. Post-typhoid insanity, will, as a rule, yield to the above measures.

There are certain mistakes which I think ought to be guarded against—for instance, friendly but damaging visits; too much or too frequently repeated feedings; feeding too often at night; too much temperature recording; too little water; disregard of antiseptics in the mouth, nose and pharynx; failure to examine the urine at intervals, and to see that the patient sleeps sufficiently. The successful treatment of typhoid fever depends largely upon attention to details with a background of attention to broad principles.

6 East Grace Street.

SELECTED PAPERS.

The Diagnostic Significance of a Chill.

B. F. Farmer, M. D., Memphis.

It is a matter of common observation that in this part of the Mississippi Valley, where the malarial infections comprise so large a proportion of the prevailing sickness, the idea of a chill as associated with such infections obtains an unwarranted hold, not only upon the minds of the laity, but of many physicians as well. Moreover, in the physician's life the distinctions, the worries, together with a physiological amount of that very human attribute, indolence, all conspire to blunt his alertness and cultivate within him routine habits and laxness in diagnosis. The purpose of this paper is, therefore, that of a reminder of a number of conditions other than malarial infections which are characterized by a chill, the neglect of which may lead us far astray in our therapeutic endeavors.

A chill is essentially a disturbance of the nervous system. In its complete development it is characterized by sensations of coldness radiating along and outward from the spinal column, of motor disturbance called shivering which may become so violent as to transmit rapid shaking motion to surrounding objects, and of disturbance of the vasomotor apparatus supplying the skin. Pain, hyperpyrexia, subnormal temperature, disturbances of the pulse and other phenomena which frequently are associated with a chill, are not necessarily physiological identified with it. All of the elements comprising a chill are not always present. The degree of severity of the development of these various manifestations is extremely variable and is not proportional to the severity of their cause.

The malarial chill is mainly distinguished by its periodicity. A history of

recurrent chills on alternate days is safe enough ground upon which to base a diagnosis of this infection, while the microscope for blood examinations now affords us a certain means of identifying it in those rarer cases of mixed infection in which the paroxysms are daily or irregular.

The infectious diseases are mostly ushered in with a chill. Especially is this to be noted in la grippe. This singular and insidious disease steals upon us like a thief in the night, and the first intimation we have of its approach may be "a chill that shakes the bed." The chill is more than likely to mark the onset of scarlet fever, measles, small pox, yellow fever, and often even typhoid. To commit one's self to a diagnosis of "malaria" and after prescribing the customary calomel and quinin, to witness in a day or two the development of a pronounced eruption of one kind or another, may be embarrassing.

Tonsillitis is usually ushered in by a most pronounced chill. I can think of no disorder which is more frequently incorrectly diagnosed. The same might be said, however, of many of the varieties of acute local inflammation, especially that of acute lobar pneumonia and acute hepatitis.

The onset of the acute disorders of the digestive system is very frequently marked by severe chills and a pronounced rise of temperature. Doubtless the abdominal surgeons present will certify to the large number of cases of appendicitis which begin with this symptom.

The irregular chills, with exacerbations and remissions of temperature and sweating which characterize the presence of pus, should be more accurately interpreted. I know of no error more frequently committed and none less excusable than this one of overlooking a possible accumulation of pus somewhere.

Acute congestive nephritis is often marked by a most distressing chill at the onset, and uremic conditions in general are very likely to manifest themselves thus.

The chill, *i. e.,* the violent shivering, minus the disturbance of temperature and pulse, which is due to emotional tension, is a familiar phenomenon. We hear one speak of having had "a nervous chill," and this is, all things considered, rather an accurate expression.

The above summary by no means exhausts the list of conditions which may be characterized by the occurrence of chills, but it embraces, I think, the commonest ones. If it be suggested that all of these are matters of everyday knowledge or should be, I would here reply that there is need of a protest against what might be called a calomel and quinine habit. Among the abovementioned disorders acute congestive nephritis is one in which, according to recent views of pathology, the administration of quinine would do positive harm. Pneumonia is one which demand quick and accurate diagnosis and vigorous treatment from the earliest possible moment, and treatment moreover which is far removed from the routine calomel and quinine. An attack of acute indigestion demands a brisk purgative, preferably castor oil, but no quinin, while a rigor due to upsetting of the emotions is easiest handled with a dose of apomorphia, and so on. But when, at the end of a day's work, you sit down and make a metnal resume of what you have done, in about what proportion of your cases have you prescribed calomel and quinin? I beg to repeat that there exists a sort of routine treatment of starting off almost any

sort of a case on calomel and quinin and then waiting to see what will happen—a routine the pursuit of which is conducive to lax methods of diagnosis, and in some few instances to positive neglect. My idea is that if we always made our diagnosis by exclusion we would see fewer cases of malaria, and that to prescribe calomel and quinin on the strength alone of a history of chills, is to run the risk of more frequently missing the diagnosis than hitting it.

Constipation.

(Read by W. T. McKinney, M. D., before the Louisville Medical and Surgical Society August 15, 1904.)

It is fully appreciated that this subject, of so much importance both to patient and physician, can not be more than very briefly and superficially recounted in the short time allotted to the reading of papers before this society. Therefore no attempt is made to minutely detail either cause, symptoms or treatment, but to treat each in the more gross clinical aspect, yet with sufficient detail to point out the chief cause and to give the essential principles necessary to a successful treatment, because I am convinced no drugs, nor drugs are specifics, and each and every case holds something in common with every other case, hence there must be a common treatment for this trouble. Nor do I consider constipation from a surgical standpoint, leaving that to the specialist on rectal diseases, whose experience both from training and observation qualify him only as competent to attend to the trouble at that particular end.

First, be it understood that constipation is defined as sluggish or imperfect pasage of feces through the tract, the degree depending upon the amount and duration of the more or less retention of this fecal mass. Second, that this fecal matter is composed of the undigested residue of the food in an admixture with the normal secretions and debris of the tract, the latter being no small amount, as is evidenced in disease when no nourishment is given from which a residue could be expected.

Some of the causes of constipation are improper food, improper amount of food, and the improper chemical action on the food during its passage through the tract.

What would be a nourishing food to one person could not be tolerated by another, the taste or after-effects of eating same being such that it would be refused. Yet, in general, what is good and proper food for one person is acceptable and nutritious to all, and *vice versa*. Circumstances and individual preference for some kinds of food often cause people to eat to excess of such, with corresponding manifestation of this excess, and likewise a showing of the want of other kinds, the eating of which had been neglected. This is often and easily done, as only a certain bulk of food can be taken, and if the necessary variety is not observed there exhibited, as above stated, the symptoms of excess and lack. The system can only derive nourishment from food that it contains. The improper amount of food can be considered from the standpoint of either too much or too little.

In the process of metabolism at least sufficient food must be taken to replace waste and repair; over this amount is more or less, depending on the kind and amount, a draft on the energy of the system, and by working the economy over time, and using up the secretions, brings about further waste and utter fatigue of the secretions, hence a resulting inability to digest food and consequent constipation.

Too little food to supply waste and repair of course brings about impoverished state. There is a loss of muscle tone, nerve force and blood discrepancies. Hence, again, a resulting inability to digest food and consequent constipation.

The improper action upon the food during its pasage through the tract depends largely upon the condition of the tract, which we have seen can be brought about by too little or an excess amount of food. Again, any pathological condition that causes a loss of nerve force, muscular tone or disturbance in the character of the blood and secretions, must necessarily, sooner or later, cause an insufficient and improper handling of the food by the alimentary tract.

Food being absolutely essential to the normal condition of the body, and some error in the food or its handling being the cause for constipation, it is readily assumed that the cause for constipation is a dietary one, unless pathological conditions exist and are the cause.

The symptoms of constipation are both objective and subjective, yet are such in individual cases that no set symptoms can be laid down, each set of symptoms while unmistakable, yet belonging to particular causes, and responding to only the proper treatment.

The treatment of constipation will vary with the individual praititconiy-p-t vary with the individual practitioner, depending upon his knowledge of the physiology of the digestive tract. In this, possibly more than in any other trouble, is it necessary to have the cooperation of the patient. A full explanation of the chemistry of digestion to an intelligent patient almost assures you success.

The first an essential treatment is to revise the diet list. Many patients will tell you that they pass unchanged articles of diet, yet persist in eating them under the mistaken notion that such food is wholesome. Variety in food should be encouraged, and at least enough vegetables should be eaten to form residue; patients should be taught that while meats are nutritious they leave a small amount of residue. As to quantity, more trouble will be experienced in getting patients to eat enough than to control them from eating too much. It is rather the quality and the preparation of the food that causes trouble.

The administration of liquids should have the closest attention. Nature provides gastric juices in the proper quantity and the proper strength, and while liquids properly taken help to maintain this normal equilibrium, yet if improperly taken are often largely accountable for the resulting digestive disturbances.

Liquids should be taken not closer than one-half hour before meals nor one hour after meals. By the observance of this rule the gastrice juices are not diluted during and just after meals, when they have their task of digestion to perform. Water, which is the best liquid to drink, is always craved one or two hours after a meal taken without liquids and at that time it is most useful, as it assists in the movement of the properly digested mass into the intestines.

Foods taken with little or no fluid allows, in fact nesessarily compels, better mastrication, and obtains the benefit of ptyalin digestion to the food, of which it is of course robbed if every mouthful is washed down with liquid. Again, if food s to be taken dry, coffee, tea, cocoa and chocolate will be dispensed with, and their injurious effect lost. Between meals much water should be drank, every patient should be required to drink at least one-half gallon

daily.

The above procedure will maintain perfect digestion in an otherwise healthy stomach, and also its strict observance will aid to bring about a normal condition in the stomach that has been required to handle an excess of liquids at meal times.

In the treatment of constipation, when indigestion is the cause, it is too often the stomach is treated when the gut is at fault. If the food is sufficiently masticated and the juices not too much diluted, no further attention to the stomach is usually required, and, too, there will be little or no disorder of the intestinal function, but if food passes into the intestines improperly prepared their function is impaired, and sooner or later constipation must ensue. Therefore, when digestants are given, such should be selected as will operate in the intestines, or at least must be added to those known to be only effective in the stomach. We may have imperfect gut digestion and perfect stomachic digestion, the result of insufficient secretions. This is generally remedied by the injection of sufficient water between meals.

To detail the drugs used and beneficial in the treatment of constipation would be entirely out of place; sufficeth it to say those used and results obtained will depend upon the diagnosis of cause.

If a degestant alone is needed we have a variety of good ones, both for the stomach and intestines.

If motor tone and vascularity is needed, strychnine is possibly our best remedy.

If secretions are to be increased, plenty of water between meals and the mineral acids after meals will give results sought.

In the matter of laxatives those that stimulate secretions in the entire tract should be selected.

I think it wise practice to have patients take a weekly saline laxative. This overcomes a sluggish bowel and improves assimilation.

Hand massage, following the normal direction of the fecal mass, is very beneficial.

Punctuality as to time of stool is productive of much good, yet it should be practiced intelligently. Going to stool at a certain time is not all that is required. Patients should be taught to dwell in thought upon the act from five to ten minutes before the time. This alone has been the means of largely increasing the value of an appointed time for stool.

The postponement of stool to a more convenient time can not be too severely condemned. The majority of observers think that the time for stool should be one when thoughts of other affairs should be excluded.

The patient should be taught to relax the muscles concerned in the act. There should be no strain, which only tends to contraction of the muscles and hinders the passage.

It should ever be borne in mind that agents used in the treatment of constipation are for the purpose of assisting nature to perform a normal function, and never for the purpose of having these agents do the work themselves. More attention should be paid to cause and its correction than to assisting digestion to combat the cause.—*American Practitioner and News.*

The Training of Patients.

Many of the ills to which we fall victims could be avoided if we had the proper foresight. Especially is this true in medicine. Not many physicians, busy with their daily cares and responsibilities, look into the future and try to

steer their patients in that straight and narrow path which leads to success and contentment. There are many problems assailing the profession, many knotty puzzles which are discussed in medical societies and medical papers which disspate into thin air if we trained our patients as we do ourselves.

This training can take many forms; it is an individual problem that each man must work out for himself, yet it bears the same general outline. The properly trained patient avoids running up too large a bill for him to pay conveniently or promptly; he never calls the physician out at night unless it is necessary; he does not become dissatisfied on slight cause and go elsewhere. He has the belief impressed upon his mind that his physician is a man, with a man's limitations and necessities.

Particularly is this true in the matter of fees. If the patient gets the impression that his physician can be paid at any time or not at all; that his bills are carelessly made out and carelessly attended to, the patient will become equally careless. It is no trouble to avoid these errors; it is no less of dignity in keeping before the patient that his bills should be promptly paid, and the patient will think more of his physician if this is done. Particularly is this true in collecting accounts; it should be done as far as possible by the doctor himself. How often has the physician allowed accounts to run for months or years without a murmur or the wink of an eyelid, and then suddenly turned some lynx eyed collector on his surprised patients, only to lose both accounts and patients. It may seem disagreeable at first, but after a pluge or two it is not found to be a fact. The successful practitioner as a rule collects his own accounts, leaving to his collector incorrigible cases.

Again, under this heading of the treating of patients, fall such problems as are discussed by Mills in a recent paper in the *Journal of the American Medical Associations* Should a physician go out at night to treat a case in a family already owing him a large bill, without any prospect of payment?

Should he treat a case involuntarily given up by another physician, when, in his opinion, the other physician has been unjustly discharged?

Should he adopt any of the measures commonly used by business men for the collection of his bills?

Should he regulate charges according to the means of the family treated?

These problems fall entirely within the education of the patient. Educate the men and women of your practice and these puzzles will fade into relics of the dreamy past.

Again, there are only twenty-four hours in the day, and a physician's time is his capital and stock. When his practice grows he should develop a secretary who can take much of the work from his shoulders—an intelligent, well educated woman can shift cases, get their names, residences, prospective means, etc., and prepare their introduction to the physician. An assistant should take family history, personal history, examination of heart and kidneys, etc., so that the foundations of the cases are ready for the busy practitioner to build. For a man overrun with work to dig for data with each case is a silly waste of time and energy. He should, of course, search for data of facts not brought out, to complete his picture, but the routine groundwork should be prepared for him by his assistants. His work will be done better, his patients will be better satisfied, and he will go to bed at night with twice or three times the results ordinarily accomplished, with far less expenditure of nervous force.—*Medical Times.*

ABSTRACTS.

A Genito-Urinary Symposium.

Report in Abstract of the Regular Monthly Meeting of the Northwestern Branch of the Philadelphia County Medical Society, Dr. Samuel Wolfe, President.

Papers Read:

The Local Treatment of Gonorrhoeic Infections. By Dr. H. R. Lous, Chief of Genito-Urinary Clinic, Jefferson Medical College Hospital; Assistant Surgeon to Philadelphia Hospital.

The Radical Cure of Senile Hypertrophy of the Prostate; Based upon a study of 145 operations performed by the Author. By Dr. Orville Horwitz, Professor of Genito-Urinary Surgery, Jefferson Medical College.

Discussion by

Dr. Edward Martin, Professor of Clinical Surgery, University of Pennsylvania.

Dr. H. M. Christian, Professor of Genito-Urinary Surgery, Medico-Chirurgical College.

Dr. R. O. Kevin, Attending Surgeon, Genito-Urinary Dispensary, Jefferson Hospital.

Dr. H. R. Loux read a paper entitled "The Local Treatment of Gonorrhoeic Infections."

Dr. Loux stated that, although a continuous service of eleven years in one of the largest genito-urinary clinics in America had afforded him unusual opportunities for observation, he had never written a paper upon the treatment of gonorrhea, because no method heretofore suggested proved, upon prolonged trial, to be an advance worthy of commendation. Clinical observation in thousands of cases convinced him that gonorrhoea is too often grossly mistreated. He deprecated the use of strong, irritating injections because they aggravate the disease and damage the urethra, and stated that treatment of acute anterior urethritis by irrigation is to be condemned becauses it causes an extension of the disease by continuity; he quoted statistics, reasons and authoritative statements to show that these opinions represented the beliefs of the leading and most conservative genito-urinary surgeons.

The speaker stated that during the past year and a half the results at his clinic at the Jefferson Hospital and in private practice, had been much better than ever before; this statement he based upon the observation of several thousand cases of gonorrhoea at all stages. The reasons for this improvement he ascribed to care ful local treatment in which he abandoned, absolutely, the use of any drug as an injection which can cause the slightest irritation. Dr. Loux stated that, in a general way, his methods of treatment were as follows: For acute gonorrhoea, he prescribes light diet, with very little meat, no fats, fruit or alcoholic beverages, but allows as much skimmed milk as the patient can drink. If the infection is confined to the anterior urethra, he prescribed the injection of two drachms of a ten per cent. solution of argyrol, held in the urethra ten minutes; this injection is made in the morning, at noon and at night. Internally, he prescribes capsules of copaiba, cubebs and sandalwood three times daily. This treatment is practiced for one week, during which time the discharge will almost if not entirely cease, there will be no pain or irritation by the injection or upon urination, and the gonococci will disappear.

If, at the end of one week, the urine remains continuously shreddy, a weak solution of astringents is employed and of these drugs he preferred zinc sulphate, iodide, chloride, hydrastiin or berzerine muriate, but emphasized that these astringents should not be used

during the first week of the disease and never in solutions sufficiently strong to produce pain or irritation.

If the two-glass test shows cloudy first and second portions of the urine, showing the presence of antero-posterior urethritis, he irrigates the anterior urethra with a warm solution of boracic acid in order to remove the accumulated secretions. Then he makes deep instillations of twenty per cent argyrol solutions once daily or on alternate days; the inflammation of the anterior urethra is treated in the manner already described.

The writer quoted from statistics of four hundred cases, treated since July, 1902, by the methods described and stated the advantages as follows: simplicity; the relief afforded the patient from pain and irritation; the extreme rarity of complications; shortened duration of diseases, in that an average time required for cure in acute cases was twenty-one days, whereas by the older methods practiced at the clinic and in private work, the best average obtainable was forty-two days.

Dr .Loux then discussed the treatment of gonorrhoea in the female, the methods of which are best described by an illustrative case: A. G., age 21, came under observation June 5, with acute vaginitis, endometritis and urethritis for which she had been under treatment in New York for one week. Typical symptoms of gonorrhoea were present; microscopical examination positive. The vagina was dilated to full extent by means of speculum. To every portion of the vaginal mucous membrane a 50 per cent argyrol solution was applied .and the same to the urethra by means of a cotton-tipped probe. The interior of the uterus was then freed of accumulated secretions by means of a cotton-wrapped applicator, after which the 50 per cent argyrol solution was applied to the cervix and the body of the uterus. These applications are repeated 2 or 3 times so as to fill the uterine cavity with the solution. This local treatment was carried out every second or third day. After eight days no gonococci could be found. For home treatment the patient was ordered vaginal douches of from 2 to 4 quarts of hot boracic acid or normal salt solutions taken in the recumbent posture. On June 20th, there was no discharge or other symptom of gonorrhoea and the patient was discharged. On June 29th, she was attacked with acute appendicitis, for which he operated and removed a slouching appendix. For the subsequent five weeks, during which she was in bed in the hospital recovering from the operation, he made observations every few days of her genito-urinary organs and there was no symptom of gonorrhoea. The patient made an uninterrupted recovery and left the hospital.

In discussing chronic conditions which result from a neglected or improperly treated gonorrhoea, Dr. Loux stated that care should be exercised in adapting methods and means to avoid irritating the already damaged urethral structures. He emphasized the necessity of making routine use of the endoscope and determine its nature.

Chronic follocular urethritis, is readily recognized by endoscopic examination and by palpation of the enlarged follicles over a bougie, and is treated by gradual dilatation of the urethra by means of bougies, massage of the enlarged follicles, and by the local application of 25 per cent argyrol solution to the individual enlarged follicles as revealed by the endoscope. This treatment is carried out three or four times a week and is by far the most satis-

factory method he had ever found.

Most cases of chronic gleet are due to ulcerative conditions of the urethra and in the management of these the endoscope is indispensable. After determining the exact location of the individual ulcerations the method of treatment depends upon whether the ulcerations are sharply localized or whether there is a coexistent general hyperaemia of the urethra. In the former case, applications of 50 per cent argyrol (through the endoscopic tube) to the ulcerations should be made at least three times a week. If general hyperaemia exists, the use of mild astringents should precede the topical application of argyrol, in order to rid the urethra of the muco-purulent accumulations. From 4 to 6 weeks of this treatment, with care in the use of instruments, will heal the ulcerations and cure the gleet in the large majority of cases.

Another very common condition is the reduction in the lumen of the urethra by inflammatory exudate, occasioned by repeated attacks of gonorrhoea or a primary case of long duration. In these cases, endoscopic examination shows the seat of beginning stricture and the presence of more or less localized inflammation. The management of these cases is extremely important because of the certainty of the occurrence of organic stricture unless the patient agrees to a several weeks' course of treatment. He should report every third or fourth day for the passage of boughies of gradually increasing sizes, followed if active inflammation exists, by the deep instillation or topical application of 25 per cent argyrol solution, depending upon whether the inflammation is circumscribed or more or less diffuse.

Dr. Loux summarized his paper as follows: Concerning acute gonorrhoea, 1. He would strongly deprecate the treatment of acute anterior urethritis by means of irrigation, because of the danger of spreading the disease to the posterior urethra. 2. Irritating injections of any kind should never be used in acute gonorrhea because of the certainty of occurrence of a mixed infection and the extension of the disease, by contiguity, to the urethral follicles. 3. Argyrol, as a non-irritating gonococcide, with a specific effect in allaying the symptoms of inflammation, is the drug of choice for injection, and may be used in any strength and at any stage of the disease. 4. Astringents, such as zinc, hydrastin, bismuth and lead, should never be used in the acute stage of gonorrhoea, but should be reserved for the post-gonococcus period when the urine remains shreddy. 5. These astringents should not be used in sufficient strength to cause the patient to experience pain or irritation.

To summarize concerning chronic gonorrhoea: 1. Endoscopic diagnosis and treatment is indispensable as a routine measure. 2. Silver nitrate or other caustic or irritating applications or instillations should be seldom used, and then only in the most skilled hands and with the greatest care, otherwise there are likely to occur structural changes in the urethra, predisposing to organic affections amenable only to surgical procedures.

The discussion of Dr. Loux's paper was opened by Dr. H. M. Christian. Dr. Christian complimented Dr. Loux upon the excellence of the paper read and stated that the methods mentioned were, in the main, those practiced by himself. He stated that potassium permanganate is of no value in gonorrhoea other than as a simple cleansing agent. Dr. Christian agreed with Dr. Loux that argyrol was undobtedly the

best gonociccide known today. After having used that silver salt continuously for more than two years, he prefers it because it never irritates, it is rapidly destructive to the gonococci, lessens the discharge and shortens the duration of the disease.

The speaker stated that it must be borne in mind that we have to deal not only with the gonococci, but with the destructive action of the micro-organism as well; in other words, destruction of the gonococcus does not by any means imply of necessity the cure of the disease, as there always remains a condition of catarrhal urethritis which requires a particular line of treatment. If a case of gonorrhea is seen in the early inflammatory stage, where ardor urinea and chordee are the most annoying subjective symptoms, Dr. Christian orders powders containing salol, sodium bromide, potassium bromide, each two and a half grains every two hours. At the same time a 5 per cent. solution or argyrol is ordered to be used by the patient as a hand injection three or four times daily, the solution being held in the urethra for ten minutes. If the patient can spare the time it is advisable to wash out the anterior urethra with several syringefuls of warm normal salt solution prior to using the argyrol injection; this line of treatment can be carried on through the second and third week. When the subjective symptoms subside, it is sometimes of considerable advantage to supplement the local treatment with the use internally of copaiba and sandal-wood oil. Ordinarily at the beginning of the third week, the patient enters upon the stage of decline, or, as Professor Finger styles it, the "mucous terminal stage" of the disease. In a case going on to recovery, the discharge is now scanty, then muco-purulent in chartceer and containing few if any gonococci and this is by far the most important stage in the treatment of the disease as regards the patient's future welfare; it is here that experience teaches that we need more than a mere gonoccidal agent. We need here in addition mild astringent lotions to help restore the integrity of the damaged mucous membrane. A good plan is to use 5 per cent solution of argyrol night and morning, employing through the day some such astringents as zinc, bismuth, hydrastin, lead, berberine, etc. At the beginning of the fifth week when nothing remains but the well-known "morning drop" and the urine is clear but contains shreds, it is well to use the argyrol solution at night and to use once or twice through the day one of the well-known astringent mixtures.

If in the second or third week the clinical symptoms and the two-glass test show involvment of the whole urethra, the treatment by hand injections is temporarily abandoned. Deep instillations of ten per cent solution of argyrol are then employed at short intervals until such time as the second urine becomes clear.

This in general is the line of treatment that the speaker had used at the University of Pennsylvania and his other clinics for the past two years and is one that has given more satisfactory results than any hitherto employed.

Dr. Orville Horwitz condemned the irrigation treatment of gonorrhoea and summarized his opinions as follows: The irrigation method of treatment will not abort acute specific urethritis; chronic urethritis and involvment of the deep organs are common sequences; in many instances, in order to effect a cure in the terminal stage of the disease, the irrigation must be discontin-

ued and other methods of treatment employed; irrigation should not be employed in the acute stage of specific urethritis; irrigation of the deep urethra by means of hydrostatic presure is injurious in the majority of cases of acute gonorrhoea, and is conducive to the development of complications; the best treatment we have today for gonorrhoea is that by means of injection of argyrol solution which are strongly antiseptic and non-irritating.

Dr. R. O. Kevin prefaced his remarks with the statement of the French surgeon, Ricord that "A clap begins and God alone knows when it will end." Fortunately, however, this statement is not as true as it was a few years ago. Dr. Kevin stated that with the use of twenty per cent argyrol solution he had been able to cure 85 per cent of his acute cases in from two to four weeks. He quoted Purdy of London who stated that since the introduction of argyrol into the enormous clinic at the London Lock Hospital, seventy-two per cent of the early cases had been cured within a month and there had been no relapses after six weeks. Dr. Kevin had been associated with Dr. Loux for several years at the clinic and could corroborate his conclusions. The speaker stated that he had seen so many acute cases cut short that he always practiced the abortive method when possible; this method is as follows: If the patient presents himself during the first 48 hours of an attack of gonorrhoea, the anterior urethra is washed out with warm water or normal salt solution. Then two drachms of twenty per cent argyrol solution is injected into the anterior urethra and held there for ten minutes; this injection is repeated by the patient every 3 hours, night and day, for three days. Even if this method does not abort the disease, it always effects a cure in a shortened period, and affords the patient entire freedom from the pain and irritation usually present in an early gonorrhea. If by this means the disease does not show signs of being aborted, Dr. Kevin practices the same methods mentioned by Dr. Loux.

Dr. Orville Horwitz read a paper entitled "The Radical Cure of Senile Hypertrophy of the Prostate; based upon a study of 145 operations performed by the Author."

Dr. Horwitz stated that the question under discussion has, with the possible exception of appendicitis, attracted more attention in the surgical world than any other subject. It is well-recognized that the danger of the patient with enlarged prostate begins as soon as it is necessary to resort to the daily use of the catheter and when this period arrives a surgeon should be consulted to supervise the case and decide what operative measures are desirable or necessary. It was emphasized that no one operation was suitable to all cases and that each patient is a law unto himself in the matter of choice of operation.

The two operations which have stood the test of experience are prostatotomy by means of the galvano-cantery, (the so-called Bottini operation) and prostatectomy. The speaker stated that the Bottini operation is extremely valuable, safe and always to be preferred to cutting operations in suitable cases. Out of 98 cases operated upon by the author, by the Bottini method, three died, two of uraemia, and one of sepsis; all three were very old men. Twelve cases were lost sight of after leaving the hospital, but were much improved when last examined. This leaves 81 cases concerning which there was obtained definite knowledge as to results. The

ages of the patients varied between 52 and 81 years. The speaker stated that his statistics proved conclusively that the earlier the patient submitted to operation, the better the results. Of the total 81 Bottini operations all the patients were either entirely cured or very much benefitted; four required second operation, and a considerable proportion were treated for several months subsequently for accompanying chronic cystitis.

Prostatectomy, the speaker stated, is regarded as a valuable operation but authorities differ as to when and how it is to be performed. As many as 20 different operations have been suggested. Here, too, the individual case decides methods, choice of operation, etc. The prostatectomies performed by the author were as follows: 3 complete (suprapubic incision); 6 complete (combined supra-pubic and perineal incisions); 7 partial prostatectomies (supra-pubic incision); 34 complete perineal prostatectomies.

Of the nine complete supra-pubic operations, two died, one of suppression of urine, one of uraemia. In all the cases, convalescence was slow; in five cases the ultimate results were all that could be desired.

Of the 34 perineal prostatectomies, six died from uremia, sepsis or shock; six cases were lost sight of after leaving the hospital; sixteen were cured, four markedly benefitted, one unimproved.

Dr. Horwitz summarized the results of observations in his 145 operations as follows:

1. A routine method is not applicable to the treatment of prostatic hypertrophy; every case is a law unto itself and the treatment will depend on the various conditions presented in each individual case. 2. The dangers attendant on the daily catheterism are greater than those of a radical operation performed at the onset of the symptoms caused by the obstruction.

3. The proper time to perform a radical operation is reached as soon as it becomes necessary for a patient to resort to daily catheterism. 4. The gratifying results obtained by a number of the operations in many cases demonstrates that the Bottini operation is one of great surgical value. It is applicable to a large percentage of cases; which if properly selected has proved to be the safest and best method of relieving an obstruction caused by prostatic hypertrophy. In those cases in which a stone in the bladder is associated with a prostatic enlargement, lithoplaxy may be performed in conjunction with galvano-cautery prostatomy.

5. A complete prostatectomy is justifiable if peformed early before the individual is broken down in health and secondary complications have supervened. In early operation the results are most satisfactory, recovery rapid, the mortality varying between five per cent and seven per cent.

6. A complete prostatectomy in feeble elderly patients with long-standing obstruction and secondary complication, the prognosis is grave and the mortality ranges between fifteen per cent and eighteen per cent. If the bladder in these cases happen to be hopelessly disabled, the results obtained by the operation are negative. Cases of this description are only suitable for supra-pubic drainage.

7. In ninety per cent of all cases the gland can be readily removed by means of a median perineal incision. The perineal operation recommended by Bryson is considered the operation of choice.

8. Complete supra-pubic prostatec-

tomy is shown to be more dangerous than the perineal operation for obvious reasons. A supra-pubic prostatectomy i safer if combined with perineal drainage.

9. Partial supra-pubic prostatectomy is indicated in such cases as where a valve-like lobe exists which interferes with urination, or where there is partial hypertrophy of one of the lobes.

10. A perineal prostatectomy is best suited for those cases where the enlargement of the lateral lobes has a tendency to progress towards the rectum, to obstruct the urethra, or project backwards into the bladder.

11. A prostatectomy is always attended with more danger than the Bottini operation and the canvalescence is more prolonged. In suitable cases the latter operation is therefore the one of choice.

Dr. Edward Martin discussed the preceding paper as follows:

He agreed with Dr. Horwitz that, if operation has been advised and consented to, the circumstances of the individual case decided which of the several operations is to be performed. He believed that the Bottini operation has proved of great value and is preferable to cutting operations in suitable cases. He did not, however, advise operation in all cases of enlarged prostate. He recognized the inconveniences and dangers attendant upon the daily use of the catheter, but believed in the value of palliative measures in the majority of cases. He recommended care in the selection of catheters and chose one that enters the bladder with the least force and least pain to the patient. If a soft rubber catheter cannot be introduced, a woven elbow one is to be chosen. If obstruction or spasm necessitates habitual resort to a metal catheter, surgical intervention is required. When patients use the instrument upon themselves, the hands should be washed thoroughly, dipped in bi-chloride solution, the meatus washed with the same solution, and be provided with an irrigating bag containing one pint of hot argyrol solution, 1 to 1,000. Infection of the bladder is commonly present and should be treated by means of bladder irrigations. For this purpose a fountain syringe, supplied with a catheter, should be suspended two feet above the level of the bladder. The anterior urethra is first thoroughly flushed, after which the catheter is pushed into the bladder and the urine withdrawn. The flushing of the bladder is continued until the return flow no longer contains pus or mucus. The temperature of the argyrol solution employed should be of the temperature of the body or a little above it. When practicable this antiseptic flushing should be done each time the catheter is passed. If this treatment is ineffi-cacious continuous catheterization becomes necessary. For this purpose a large soft rubber catheter, or a self-retaining one, is selected and the antiseptic solution introduced; if the catheter is properly introduced, the entire amount of the solution will return. Twice a day the urethra and bladder are thoroughly flushed with the antiseptic solution, the catheter being withdrawn far enough to allow the injected fluid to escape from the meatus, and then being pushed back into its former position.

The success of this treatment depends upon securing free and continuous drainage and this is incident to the permeability of the catheter and its retention in the proper position. When skillfully applied it is one of the safest and most successful means of treating cystitis, which so frequently compli-

cates obstruction from prostatic enlargement.

The Differential Diagnosis of Typhoid Fever in its Earliest Stages.

(*Journal Military Surgeons.*)

Rucker reaches the following conclusions:

(1.) There is no single symptom on which an early diagnosis of typhoid fever can be made. It is only by careful consideration of the symptom-complex that a clinical diagnosis can be arrived at.

(2.) The most trustworthy, as well as the earliest, sign of typhoid fever is the presence in the circulating blood of the bacillus of Eberth.

(3.) The demonstration of the bacillus of Eberth in the blood is not beyond any fairly well equipped laboratory.

(4.) The bacillus of Eberth is found in the feces later than in the blood but with comparative ease. The presence of the bacillus typhosus in the feces is of great value as a corroborative sign.

(5.) The presence of the bacillus typhosus in the rose-spots is a trustworthy sign, but has no advantages over examination of the blood from other localities.

(6.) The serum reaction of Widal is seldom demonstrable during the earliest stages of typhoid fever. It is of value only in the higher dilutions.

The Treatment of Alcoholism in the City Hospitals of New York.

Collins states that there are three classes of delerium tremens cases treated in the City Hospital: (1.) Those with rank delerium tremens; (2.) Those who seek relief for nervousness and prostration following a debauch; and (3.) Those who develop delerium tremens while suffering from an acute disease such as pneumonia. The treatment varies in each case, but indications are: (1.) To maintain the patients vitality; (2.) To overcome the motor unrest and emotional agony; (3.) To secure sleep. The patient is first given 15 grains of gray powder, followed by a saline. Predigested, partially digested, concentrated nourishment administered hot, by the stomach or rectum, or both, is relied upon to maintain the vitality of the average severe case rather than stimulants. To overcome motor unrest and emotional agony the hot bath and hot pack are used, where these measures do not suffice hyoscine hydrobromate is given in doses of 1/100 to 1/50 grain. He condemns the use of opium, chloral, and the chlorides as usually used. His use of alcohol is limited to those cases which develope delerium tremens during the course of an acute disease and which are in need of active stimulation. To secure sleeep he uses trional veronal and paraldehyde.

Rectal Constipation in Women.

(*Medical Record.*)

Grace Peckham Murray states that rectal constipation in women is mostly of mechanical origin, due to causes which are peculiar to women, such as uterine displacements, prolapsus, and nervousness. She believes that one of the chief causes of constipation in women is due to a pouching of the rectum. That when the sigmoid is emptied if the mass is not discharged, that an antiperistallic action takes place and the mass is drawn back from the rectum. She reaches the following conclusions:

1. It is generally recognized that women for various reasons are most subject to constipation, nevertheless rectal constipation, from which a large number suffer, has received, at the hands of the profession, scant consideration.

2. Rectal constipation may be, but is rarely, due to a nervous condition, *i. e.* nervous rectum. While it may occur as the result of inflammatory conditions, such as hemorrhoids, fistulae, and fissures, which are common to men and women alike, in very many cases it is occasioned because of the peculiar anatomical construction of the parts, and is mechanical in its origin. Anteversions, retrodisplacements, neoplasms, especially fibroids, and periuterine inflammations obstruct the downward pasage of the faeces. Conversely owing to the close juxtaposition of the rectum and the genital organs of the woman, a loaded rectum in its turn may occasion ovarian and uterine displacements and disorders.

3. A form of rectal constipation which heretofore has received but little recognition is that which occasions and is the result of the pulling down of the rectovaginal septum, thereby forming a pouch, constantly increasing in size, changing the direction of the intra-abdominal rectal pressure to that of the vaginal, which is at right angles to it, and making it difficult for the rectal sphincters to relax so as to void the contents of the bowel. The result is not only to render defecation difficult but incomplete. The retention of fecal matter causes rectal irritation and autointoxication. This condition occurs not only in women who have borne children, but in nullipara and the unmarried, although not so frequently in the latter.

4. In regard to treatment: Cathartics may be useful in those cases in which the obstruction is due to inflamed and displaced organs or neoplasms, which prevent the descent of the contents of the bowel and in which the hardened masses of the faeces press and inflame the genital organs, but would be useless in those cases in which there has been a displacement of the rectovaginal wall. In such cases, glycerin or gluten suppositories, or injections of small amounts of olive oil, glycerin, or soothing fluids, may be employed. The use of daily enemata, as ordinarily practiced, is to be reprehended from every point of view. The use of bougies or dilators may prove beneficial. For constipation of purely rectal origin, massage, electricity, and measures designed to improve peristaltic action are of no avail.

The Use of Electricity in Skin-Grafting.

Rushmore reports seven cases of skin-grafting in which he used high frequency discharges. He quotes from Dr. Wight as to the method of application:

"I have been able to show that high frequency discharges will clot blood, acting as a haemostat, and will coagulate serum albumen; but this is in some degree due to the formation of nitric acid from the air; but there is no destruction of tissue with ordinary care. I have made use of this in sealing surfaces after the removal of several diseased areas, especially in the neighborhood of bone and in fixing grafts to granulating surfaces, the results of which have been so uniformly successful in my experience that I now ask attention to the technique of this method of electric grafting. Render the granulating surface sterile; prepare it to receive the grafts by curetting it thor-

oughly; and, while it is still oozing, place the grafts of any form desired in position on the surface and bathed in blood; apply the high frequency discharge from a pointed electrode at about one-quarter inch distance over the entire surface till clotting is firm and the grafts are fixed in a dry surface. Serum that is squeezed out in the process of clotting should be sponged off. The dressing consists of three per cent. carbolized vasaline and plain sterile gauze. It is renewed at the end of the third day. The repair follows in the usual way, but takes a shorter course. Repair was hastened in some cases in which the secondary Rontgen rays were used at the end of the first week.

He states in conclusion that the use of the electric method, in attempts at healing old granulating surfaces with small grafts, is more exact and successful than any way heretofore employed.

The Relation of Acute Infections to Arterioslerosis.

(*Journal American Medical Association.*)

Thayer and Bruch reach the following conclusions:

As the result of an analysis of the records of nearly 4,000 patients entering consecutively the medical wards of the hospital, we find that:

1. The percentage of palpable radial arteries is materielly higher among those individuals in whom there is a history of heavy physical labor and of the use of alcoholic stimulants than in the remaining cases. This percentage is appreciably higher in the cases giving a history of heavy work.

2. The percentage of palpable radial arteries is higher among those cases presenting a history of severe infectious diseases than among those in which this history is absent or among those in which a history of no casual factor could be obtained. The proportion is, however far below that in the case of work or alcohol.

3. Rheumatism appears to be the acute infection after which the percentage of palpable vessels is highest, and next to rheumatism, typhoid fever.

As previously stated, it is well recognized that the results of such an investigation as this justify only rather rough generalizations.

Are we even warranted on a *post hoc propter hoc* principle, in assuming that work, alcohol and in subordinate way the infectious diseases are the main or important causes of the changes which result in palpable radial arteries? Not necessarily. It is, however, not uninteresting that the results should, so far as they go, support the generally accepted views.

It seems to us that there can be small doubt that the main etiologic factor in the development of the hyperplastic thickening of the intima, which constitutes so important an element of arteriosclerosis, is overstrain of the vascular walls, continued or intermittent high tension, whatever its ultimate cause may be. Heavy physical labor is assuredly one of the most important of these causes. It is not inconceivable that the role of the acute infections may be rather in the production of those focal degenerations with secondary regenerative changes which constitute the other important element in arteriosclerosis.

Immediate Repair of Injuries to the Pelvic Floor.

(*Med. Record.*)

Coe states that he believes that by careful attention to recent lacerations

immediately after labor the patient can be spared the necessity of subsequent operations. The question is not "Do we repair such lesions?" but 'H'ow do we repair them?" That we understand perfectly well why it is that a woman who apparently sustained a superficial tear, repaired at the time, should present herself a month or two later with a rectocele, prolapse, and all the evidences of loss of suport of the pelvic floor. The fact is that she had not a simple laceration of the perinaeum but an actual rupture of the fascia and levator ani muscles outside the vaginial tube. He states that he has found that the circular buried stuture, suggested by Studdiford, which penetrates the entire thickness of the vagina at the sulci, does permantly reattach the torn fascia and restore the parts to their normal condition; and that this suture or a modification of it (of chronic gut or better kagaroo tendon) should be used if the surgeon expects to avoid the rectocle which is itself an indication of imperfect technic.

Physicians for the Canal Zone.

Our Washington correspondent writes that the Canal Commissioners have decided to employ a large number of recent medical graduates as internes in the hospitals along the route of the canal. The salary has been fixed at $50 per month with living expenses, and the term of service will be two years—doubtles with the privilege of renewal. There will, of course, be no difficulty in securing the required number of well qualified men on these terms, poor as they are—indeed, we understand there are already over five hundred applications on file, but any graduate in medicine who contemplates applying for appointment in the service should seriously consider what such a step means. The love of adventure is strong in the young, and the pull of the tropics on the native of the north is powerful; but there will be little of avdenture for the house officer in a lonely hospital in the center of the Ithmus, and a tropical climate, after its first temporary stimulating effect, cripples the will and weakens the body of the unacclimated northerner. The great tropical plagues, malaria and dysentery, are theoretically avoidable, but practically every one is in constant danger where they prevail, and other diseases there are which incapacitate if they do not kill. The true physician, like any other true man, would never shrink from his duty through fear of disease or death, but no duty calls the civilian physician to the Isthmus; no young man should delude himself with the thought that his country needs his service on the Canal Zone. He will be hired to do a certain work, just as the canal laborerers will be hired to dig, and if he falls out by the way or comes home invalided and with a shattered constitution, his country will give no furthe thought to him; his pay will stop and he can support himself as best he may or live on his relatives or the county. The salary of fifty dollars a month will not go far at Panama, and the young man who thinks he will be able to save enough from it in two years to give him a good start in practice after his return home will be disappointed.

We have purposely exposed the dark side of this picture, not with a view of discouraging any young man, free from home ties, who can live his life as he will, from seeking a medical appointment in the Canal Zone, but only that he may do so with his eyes open. And that life there will not be without its attractive side we are free to admit. The climate of the Isthmus, in spite of what



The Largest and Most Thoroughly Equipped of Sanitariums

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those who know only Colon may say, is in general not so bad; the heat is not intolerable, and with care and good luck one may keep his health, though the vigor infused by winter cold will fail. The work will probably not be very onerous, and though the future will not be provided for, the daily needs of existence will be met sufficiently. Then for one who loves his science, the rich opportunity to study tropical diseases, which life in a canal hospital will provide, will go far to compensate for many drawbacks. We would simply warn those who are tempted to go to the Isthmus to remember that the actualities of life there will be very different from what the imagination pictures them, and that there is no patriotic call to which they must respond. No individual's services are needed there, for there will be more applications than there are places to fill, and if one goes let him go with a knowledge of what he is doing, undeceived by the glamor of adventure of the *dolce far niente* of the tropics of the poet and the dreamer.—*Medical Record.*

A Substitute for Rubber Gloves.

J B. Murphy is now experimenting with a temporary coverin gofr the hands while operating. He immerses hi hards in a 4 to 8 per cent. solution o gutta percha in benzine. This leave the hands covered by an impervious an sufficiently durable rubber coating. Thi film is very thin and does not interfer with the delicacy of touch. The fals skin can readily be removed by washin the hands in benzine.—*Buffalo Medica Journal.*

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., OCTOBER, 1904. No. 10

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

Advice to Young Doctors—Personal Appearance.

The personal appearance of all physicians is a large factor in securing practice. In the young doctor just starting out, it is one element that he cannot afford to neglect, if he wishes success. In the business world, tidiness, neatness, cleanliness are essential to the young man seeking a situation. No business man wants a dirty, ill-kept, uncouth man to go before his customers. The doctor is called to all sorts and kinds of people, and while he may and very often, possibly more often, will visit homes of unhygienie surroundings, the calls to families of culture and refinement, where any disregard to personal appearance will be noted, will be of sufficient frequency for its influence to be felt by the doctor. Even if this was not the case, the doctor should be an object-lesson to the public in his dress and deportment. He should show by example as well as by precept how to live aright. There is a certain dignity of bearing accompanying the well-dressed and well-governed man in any calling, that cannot be similated without it. The doctor's life, his work and his association with his clientele all demand a degree of cleanliness that is not expected of any other class or profession and he who overlooks this factor in his general character will be handicapped in the race for the goal of success. A dirty man cannot be a modern surgeon, and while he may know medicine as well as his competitor, it will be impossible for him to apply it as well, even if the opportunity is given in the patients on whom to apply his skill. But a discerning public will not employ the rough, uncouth doctor. It is educated to believe that cleanliness is an essential agent in the treatment of disease and rightly considers that the unclean doctor cannot or will not be clean in his practice.

Some of the doctors work is necessarily dirty in character. The examination of uterine cases; cases of rectal troubles; venerial diseases are always more or less dirty; many skin diseases cannot be satisfactorily examined

without soiling the hands; obstetrical work is often very dirty; it may even in exceptional cases be necessary to administer an enema personally, or demonstrate the irrigating of the uterus or urethra, these and many others that might be mentioned are sources of contamination, and while perhaps essential often, they are frequently entirely too carelessly performed for the moral and mental effect upon the patient and family. They should when performed at all, be executed with the minimum amount of contamination consistent with good work, and ample care be stowed upon removal of all evidences of dirt immediately. In well cultured households the washing of the hands after the handling of a patient with a fever is not amiss, and its influence will be felt.

The doctor has no right to go into the sick room of a refined patient other than as a gentleman paying a social visit to the same class. Great care should be be bestowed upon the toilet before commencing the day's work. Be sure you start out well groomed and with ordinary care it is not necessary to let your appearance trouble you during the day. In other words, start out neat in the morning and keep neat without attracting attention to your efforts to do so. The hair and beard should be given due attention in the trimming and in the daily dressing. Surgeons should not wear a beard, and all who shave at all should do so daily. Be sure to keep the hands clean and soft if possible, and the nails well trimmed and polished. The writer once knew of the change in the family physician for no other reason than dirty finger nails. The doctor was well read in his profession and as successful as any of his competitors, his general attainments were all that could be wished, he was genial in the sick room, and well liked by most of his patients, but this particular patient had an aversion to seeing his long dirty nails upon her wrist in feeling of her pulse, and she secured another physician. There is a personal odor eminating from the body of all people and in some this is very pronounced, especially when much heated. This is very obtionable in the sick room, and every effort should be made to correct it. Pronounced odors of any kind are distasteful to the sick and should not be tolerated in the presence of one unable to avoid them. Avoid as far as possible the carrying in the clothing odors of drugs, the shop, or the stables.

Let your dress be neat and in perfect taste. Its cut should be in the prevailing style, without being either the first to introduce new features or the last to abandon old ones. Do not dress in a manner to be conspicuous, or attract attention by the loudness of your attire. If you are conspicuous at all in your dress let it rather be by its neatness and simplicity. It is not essential that it should be costly, but it should be of good material, and well fitted. Ties, collars and cuffs should be in perfect taste and always fresh, and the shoes polished. Negligee attire is permissable for summer months but much more care is required in wearing it, lest good taste be offended.

The same care that is shown in the dress should be given the driving turnout. A firebald or calico horse may attract attention, and a peculiarly constructed vehicle, be a matter of comment. The horse may be a good one and the vehicle offer many advantages in comfort and lightness of draft, but if they are to be used as a means of advertising the owner, good taste will have been violated to the detriment of ultimate success. No one needs a good

horse and a comfortable buggy more than the doctor, and generally no one loves and appreciates them more than he. It would be false economy to stint in this particular, but the expenditure, whatever it is, should be in harmony with principles advocated in the dress. Speeed in horse flesh is desirable, but stability and reliability are absolutely essential. The buggy should be both roomy and comfortable, with ample protection for inclement weather.

The deportment of the doctor in the sick room is the great criterion of his fitness for the practice of medicine, outside of his actual knowledge of the science. Next to his sick room manners, the condition of his office and his use of it, is the most potent factor by which he is pjudged. The doctor's office is his work shop. His desk, his papers, his journals, his books, his instruments, his chemical and perhaps some other paraphanalia are his tools. It is here he prepares for his fight with disease, and probably here does his best work. He should therefore make it both comfortable and convenient, whatever its appertances, it should always present an ordely appearance. A littered desk or table, soiled towels, uncleaned instruments, books scattered around over chairs and table, a bloody wash basin, may indicate that you have been engaged in an operation, or intent on looking up some special question. This is of course unavoidable for a short while. To leave the office in disorder for any considerable length of time could indicate that it was for effect upon the public. Rest assured that if you perform many operations the public will learn of it without the aid of soiled instruments, bloody water in the basin or pus covered cotton batting and bandages in view of visitors to the office. And if you are of a studious nature and given to looking at authorities on obtruse questions arising in your practice, it does not require a multitude of open books scattered around the room or many old journals taken from the shelves for the public to appreciate your devotion to your calling. A littered desk with unanswered letters, unopened journals, a few daily newspapers, some old circulars, a lot of note and bill heads filed up in elegant confusion, does not indicate that you are too busy to properly arrange your effects but rather that your business qualifications are of a loose nature and you are untidy in your habits. Keep your office and all its belongings in perfect order. Have a place for everything, and keep everything in its own place. A clean office will be inviting to nearly all your patients while a dirty one or one even that is only in disorder will be repugnant to the large majority of them. You never know at what moment a visitor or patient will call and so it is always the better plan to keep in readiness for their reception. Do not allow your office to be used for social gatherings by your friends.

All the advice given in these papers is drawn either directly or indirectly from the personal experience of the writer, and the account of a strictly personal episode of this character will not be amiss. It was in a small town and only a few years since when there was a grown daughter in the house, with a few visiting friends. In an effort to make their visit pleasant, a collection of raw oysters, sardines, pickles, etc., was spread upon the office table and a crowd of four or five girls inveigled into the office at ten o'clock at night. It was a regular lark we all enjoyed, and none more so than the writer, but some one saw the lights, and some one peeped through the window, and some one

heard the girlish laughter in the staid old doctor's office at near midnight. The odor of the sardines, the pickle bottles, the sight of strange girls—well, let's draw a veil over the scene, and take warning!

Diphtheria Epidemic.

The prevalence of diphtheria in epidemic form in the South Atlantic states from Virginia to Florida as told in the news columns of the daily press makes a word of caution timely. While we hope the epidemic will have been controntrolled before this reaches our readers, we feel constrained, nevertheless, to insist upon every effort being made to stamp out the disease at once. While in many sections the character of the disease is mild, in others it is very virulent, death resulting in some instances within less than twenty-four hours from the recognition of the trouble. The public seems slow to learn the dangers of a widespread epidemic of this kind and the first duty of the physician, insist that the people must aid in any effort to abate its ravages. Complete isolation of every case and strict quarantine of all those coming in contact with it, as well as the premises are essential. All children and better all under sixteen years of age should be strictly kept off the streets and away from public gatherings of every kind. Much care should be bestowed upon keeping the premises in good hygenic condition, free from stagnant water, cesspools, and household slops and refuse of every kind. Lowered vitality makes the individual an easier prey to the disease and the general health should be kept up to a high standard. After a case has been dismissed the rooms occupied, better the whole house, all the clothing, bedding, furniture and utensils of every kind must be cleansed and fumigated and all persons contaminated should bathe in some antiseptic wash, special care being given the hair, beard, nose and mouth; treating the last two with antiseptic spray.

Nothing short of this will suffice and the physician who countenances halfway measures in these respects is recreant in the duty he owes the public.

Diphtheria is an insidious disease and often valuable time is lost in its treatment for want of an early diagnosis, either because a physician was not called or he failed to recognize the trouble. In an epidemic of this character the simplest ailments of children ought to have the care of a physician *and in every case regardless of the symptoms the throat should be examined.*

Antitoxin is as near a specific in diphtheria as we have in medicine and should be used freely, remembering that the earlier it is used, the less it requires, and the more pronounced its benefits: remembering, too, that heroic doses 2,000 to 2,500 united have saved apparently moribund cases. When in doubt as to diagnosis use antitoxin. Cases of membranous croup, tonsilitis, laryngitis, etc., are benefitted by antitoxin. As to the harm produced by antitoxin the general opinion of the profession is that it is rarely observed and very slight in any case, and the benefits to be derived from its use completely overshadow any evil after effects.

Use prophylactic doses of antitoxin, 500 to 1,000 unites according to age in every child or young person that has been exposed to the disease, and do not forget that adults are also liable to contract it; no case of sore throat should be neglected.

No arguments are presented here to enforce or sustain the views given because they are almost universally accepted by the profesion.

Our object in recalling them is to impress upon the profession the necessity of greater diligence and care in the face of the danger upon us and the greater one threatened.

It may often require courage to insist upon some of the measures advocated, but if the disease is to be controlled it will be by and through these measures and the public looks to the profession for guidance.

The Extended Use of Ergot.

The exact modus opperendi of Ergot is not yet fully understood by the profession. Its usefulness as an oxytoxic has been known for a century or more and in many affections of late years its efficiency has been demonstrated largely in an empirical way. Notably among these can be mentioned acute and chronic dysentery, chronic diarrhoea, some forms of hemorrhoids, especially those succeeding delivery, and relaxation of the spincters. In anuerisms, and more especially the miliary anuerisms of the intracranial arteries, in congestive headaches, in recumbent and epileptic manias, its utility is acknowledged.

While one set of observers claim that there is an increased blood pressure after the administration of ergot, and another claims a diminished pressure, there is no doubt of the fact that it exerts powerful influence over the vascular apparatus (Bartholow). Clinical experience would indicate that this influence was dependent upon its effect upon the non-striated muscular fibres. It has the power of stimulating and toning up the nonstriated fiber wherever found and thus opens up a wide field of usefulness that has not been fully appreciated. In prolonged alcoholism, it controls the smaller arteriols and equalizes the blood pressure as no other remedy will do, and for the extreme nausea after prolonged anesthesia it acts charmingly. It is indicated in any congested state of the vascular system either local or general. Personally we have secured excellent results from it in cases of insomnia dependent upon cerebral congestion, as also in heart failure, where there was a partial paralysis of the vascular system, producing overexertion of the heart.

Usually we have administered the remedy by the mouth, but there is no doubt that its use by the hypodermic syringe offers many advantages, especially is this so when quick action is desired or excessive doses are to be used as it is hard upon the stomach.

Prophylaxis of Venerial Diseases Again.

The Washington (State) Medical Association, after receiving a report of a committee appointed to investigate the subject, on the prevalence of venerial diseases and official measures to suppress them, at its last meeting, made the committeee permanent. It also appropriated the sum of fifty dollars for the use of the committee in securing and disseminating literature on the subject. From the discussion in connection with the report we learn that it is the purpose of the committee to put literature in such a form that physicians can have it at hand in concise form to base an argument upon to their patients, the clergy, and others whom they may wish to educate. This because physicians generally, have not the time to look up these authorities and statistics, and men eminent in the profession have supplied the need. Small printed slips that can be taken out of a drawer and handed a patient telling him what to do and what not to do, emphasizing the necessity of morality

and continenence, can not fail of accomplishing good.

This is a long step in the right direction, that of educating the masses on this point and should be adopted, or something similar to it, in every section.

Editorial Notes.

Dr. Geo. F. Shrady, for thirty-eight years editor of the *Medical Resord,* has retired from editorial work. Dr. Shrady was one of the foremost editors in medical journalism, and has probably been in the harness longer than any other American writer. His work has always been characterized by a high order of merit, and a demand for everything that tended for the upbuilding of the profession.

The American Association for the study of Inebriety and the Medical Temperance Association have united to form the American Medical Society for the Study of Alcohol and other Narcotics. The objects of the new organization are: (1) to encourage and promote exact scientific studies of alcohol in health and disease, (2) to secure more accurate investigations of disease following or associated with alcohol and narcotics, (3) to correct the empirical areatment of these diseases, and secure legislation against nostrums claiming to cure them; (4) to encourage special legislation for the cure, control and medical treatment of spirit and drug-takers.

As these problems are assuming large proportions and the public is looking to the profession for aid and advice—medical men are invited to use the society for a concentrated effort to clear away the present confusion and aid in creating a healthy moral sentiment. Dr. T. D. Crothers of Hartford, Conn., is the secretary.

The August issue of the Bulletin of the North Carolina Board of Health is devoted to the prophylaxis and some advise on treatment of pulmonary tuberculosis. It is well written, concise, direct, and thoroughly up to date, without any unnecessary verbage. The article is also published in pamphlet form for gratuitious distribution. Physicians can help greatly in this crusade against consumption by placing this pamphlet in the hands of their patients, and especially of those with tubercular tendencies, and in families where it already exists. Dr. R. H. Lewis, secretary of the Board at Raleigh, will cheerfully supply copies where needed.

Tramps as disseminators of contagious diseases have not received the consideration that the subject would justify. Their filthiness offers a rich field for the propagation of bacterial organizations and their paripatetic nature makes them carriers of contagiou in dangerous degree. Their loathsomeness prevents personal contact to any considerable extent, but their herding together for sleeping in out-houses, barns, etc., and their frequent stay in jails and the town calaboose for a night's lodging all add to the risk of leaving some contagious disease or parasites in their wake. The New Berne *Journal* called attention to this danger a few months since and if others of the lay press would do likewise good would be accomplished.

A Card.

To the Medical Profession of the State:

In the "Principles of Medical Ethics" promulgated by the American Medical

Association and adopted by the Medical Society of the State of North Carolina, it is specifically set forth, that it is incompatible with honorable standing in the Profession, to resort to public advertisements or private cards inviting the attention of persons affected with particular diseases; to promise radical cures; *to publish cases of operations in the daily prints, or to suffer such publications to be made;* . . . or to employ any of the other methods of charlatans."

In both the Raleigh morning papers of Sept. 14th, there appeared an account of the X-Ray location of a bullet in the body of a wounded man and of the opertion for its removal, in which our names were used in a way calculated to do us a grave injustice and to put us in a false position in the eyes of the profession, whose esteem and good opinion we value too highly to let the matter stand as it is. The publication was made in such circumstantial details as to justify the conclusion that we had both furnished the same and inspired their publication. If we had really done so, we would have committed, thereby, a gross breach of professional ethics and rendered ourselves liable to the just censure of the profession.

We did not inspire the said publication nor authorize the use of our names in connection therewith. On the contrary, one of us—when approached by a reporter—specifically requested him not to mention our names in the premises.

Under the circumstances stated above, we feel that it is due to ourselves —and the profession at large—to make this public disclaimer and to state the following facts, to wit: One of our medical students, Mr. M. R. Farrer,—thinking to do us a kindness—gave the account to the reporters substantially as published, except that he did not emphasize his own prominence as the newspapers did. It is only just to Mr. Farrer to say, that—being an undergraduate—his attention had not yet been called to the unethical aspect of such publications, as viewed by medical men.

We are confident, that those who know us well will need no disclaimer from us, but to those physicians who know us but slightly, or not at all, we feel that we owe the statement given above.

A. W. Goodwin,
A. W. Knoz,

Raleigh, N. C.

Selections From Our Exchanges.

Eye-Strain.

The *Edinburg Medical Journal* for July, 1904, in referring to eye-strain as a factor in disease and its relief by glasses, gives vent to the following sensible views apropos of some American authors who believe that this cause may produce almost any set of symptoms. It says that to a thoughtful mind a curious feature of medicine, and doubtless of other sciences also, is the effect of fashion and habit in reference to methods of treatment, to theories of disease, and what not. Some one discovers a principle which may prove, on investigation, to be of far wider application than at first was dreamed of, or suggests a method of treatment for some malady, posibly arrived at empirically or even accidentally. Its use extended to other diseases, in a bludering fashion sometimes, after careful

reasoning at others; and it is found by its means that two diseases, not hitherto supposed to be distinct, are in reality quite separate entities, reacting in diverse manners to the new method; or again, two separate and disimilar diseases are found, by their analogus reaction, to have really one common basis. That which was simple becomes complex; that which was complex becomes simple.

At a later stage the theory or the drug, having been tested for all forms of evil, has "bomed," as the phrase is, in season and out of season, having been applied here, there, and everywhere, is found to have an area of suitable application quite other than the promised "Promised Land" of the visionary's speculation visible from the Pisgah of inexperience. Then, to change the metaphor, the reaction comes, and the theory or agent is discredited and looked upon more and more coldly; and a theory of ailment, or a means of cure, which within proper limits is of real value, is totally relegated to limbo and black night, because it has failed to fulfil the extravagant and unreasonable hopes which were at first embraced regarding it.

These thoughts were suggested to the writer by nothing what is now being said in certain quarters regarding eye-strain. Eye-strain and its results, or the existence of an error in refraction or position of the eye, and the reaction in the system consequent upon the efforts made to correct it, has had an interesting career. Who first discovered its malignant powers does not greatly matter—there it is. Neglected for a time, it after a while "caught on," and then in certain quarters and by certain physicians it was made the scapegoat for everything and anything. The theory was (or is) that by reason of the constant efforts to correct come optical error so much waste of nerve force is incurred that many morbid reflexes are set up. If the exponents had been content to be moderate, and to attribute to eye-strain headaches and similar symptoms, they would have carried with them the good opinion of all sound practitioners, but the list of "convictions" recorded against the prisoner has been swelled to an appalling bulk. We are told, for example, in a book by Ranney (New York), one of the most zealous of the zealous, that diabetes is at times due to eye-strain. Gould (Philadelphia), another John Baptist of eye-strain, considers that it may be to wear and tear produced by eye-strain that the tubercle bacillus owes its chief chance of success in attack. Another writer atributes moral delinquencies to astigmatism.

A very interesting discussion, to judge from the published reports, took place recently in the New York Academy of medicine, the subject of which was, "The Eye in its Relation to Functional Nervous Disease." The first paper was by Dana, who divides eye-strain into two varieties: (1.) an effort to overcome errors of refraction or of muscle balance, and (2) an effort to supplement cortically the imperfection of the images received by a defective eye. This latter kind of strain, was in his view the only kind of strain which could do any harm. We do not say we altogether agree with this statement, but with the following sentences we are certainly in accord: "Glassing was enormously overdone as well as underdone, and had become in a way a real psychosis." In several of the other papers, too, there was made a strong plea for more common sense in the view taken in regard to eye-strain than prevailed in some quarters. I dealing with

chorea, Dr. Sachs was very trenchant; from his personal experience he did not know, he said, of a single case in which the epileptic seizures had been altogether inhibited or even diminished in number by the wearing of glasses, or by any other ocular measures which had been adopted.

From the frank expresion of these views, contrasting so strongly with those mentioned previously, it appears, then, as though the palmy days of eye-strain were beginning to decline. It is very necessary that this should be so, for the claims made by fadists on its behalf have been absurdly extravagant. It is in America almost entirely that these fadists and their pretensions have flourished, and now in America even the axe is being laid to the root of the tree. What we would urge is, that we have in eye-strain, if that be a suitable expression, a source of reflex irritation and loss of nerve force capable of doing much functional injury to an unstable organ; we ought to recognize this perhaps more frequently than we do. But on the one hand we ought not to be led astray into thinking that it is the root of all evil, while on the other we must not abandon the recognition of its existence as a very serions and somewhat frequent evil, because its enthusiastic friends had "puffed" its merits unwisely in the past. The frog is still a good frog, although it has failed to make itself look like a bull.—*Therapeutic Gazette.*

Peroxide of Uinic in Surgery.

Peroxide of hydrogen is not durable, and after the oxygen has been liberated nothing remains but water, and water is destructive to the cells. Peroxide of zinc combines all the advantages of peroxide of hydrogen with none of its drawbocks. It has the same properties as zinc oxide, but with an additional molecule of oxygen, which it yields readily, especially in contact with tissues. The author has applied it to recent and old wounds, burns and torpid lesions. Gauze medicated with it aids in healing, at the same time suppressing odor, as he found in ten cases in which it was used as a dressing after colpotomy. It has always been found an energetic antiseptic, neither irritating nor toxic, keeping well and easily sterilized. Chaput (Presse Medicale, vol. i, No 38, 1904).

Unusually Large Twins.

EDITOR MEDICAL WORLD:—On Sunday, June 19, I was called seven miles in the country to attend a lady in confinement. She had been in labor twelve hours before sending for me. After about an hour I gave her chloroform and performed version and delivered her of a boy, and in fifteen minutes after I turned a *second* baby and delivered; both boys. The first weighed twelve pounds, and the second eleven pounds. Twins and mother doing nicely. The reason I report this case is on account of the weight of the twins—it is the largest I ever heard of; but perhaps some of The World readers have delivered larger ones. Single placenta. E. M. CLAY, M. D.

Renville. Minn.

——*Medical World.*

Percentage of Alcohol in Beverages.

The different amounts of alcohol contained in the various wines and spirits of commerce are given in tabular form: Whisky, brandy and gin from 40 to 50 per cent.; sherry and port about 18 per cent.; chamjagne about 12 per cent.; hock and claret from 8 to 12 per cent.; beer from 3 to 8 per cent.; cider from 5 to 9 per cent.—Health.—*Pennsylvania Medical Journal.*

The Action of Saline Purgatives in Rabbits and the Counter Action of their Effect by Calcium.

A publication by the University of California on this subject, written by Dr. John Bruce MacCullum, has recently been issued. Schmiedberg, in his attempt to explain the action of saline purgatives, states that these salts are absorbed with difficulty and hence reach the lower part of the intestine unchanged.

Wallace and Cushny suport this view and add that the absorption of fluids from the intestine is retarded, especially by the salts with calcium. Loeb, while not denying the possibility of the inhibiting action of the saline purgatives on absorption, states that these salts are identical with those which produce contact irritability, muscular twitchings, and hypersensitiveness of the nervous system. Further, he suggests that the increased peristalsis may be due to an increase in the irritability of the nerves and muscles of the intestines.

MacCullum, in order to decide this question, made a series of experiments on rabbits, testing the action of a number of salts, and reached the following conclusions:

(1) In general, the saline purgatives act not only when introduced into the intestine, but also when injected, subcutaneously or intravenously. (2) The intensity of their action is greatest with barium chloride and decreases approximately in the following order: barium chloride, sodium citrate, fluoride, sulphate, tartrate, oxalate, and phosphate. (3) The purgative action of these salts is caused, first, by an increase in peristalsis, and, second, by increased secretion of fluid into the intestine, both of which can be directly observed. (4) Although the writer has not specially studied the secretions of other glands, he has noticed that in a number of cases an increased flow of saliva and urine occurred when these salts were introduced into the body. (5) Intravenous injection of 1 to 2 c.c.m/8 solution of these salts increased peristalsis within one minute. When introduced into the intestine, it takes ten to fifteen minutes, and five times the amount to produce an equal effect. (6) This seems to indicate that even when these salts are introduced into the intestine, they must be absorbed into the blood before they can produce their purgative effect, and that they effect the intestine by increasing the irritability of the nerves and muscles, as Loeb has suggested. Their action in producing less solid faeces is not due to the prevention of the absorption fluid from the intestines, but to the production of an increased secretion of fluid into the intestine. (7) By the continued administration of small doses of sodium citrate, a chronic condition of hypersensitiveness of the nervous system may be brought about in rabbits, which persists for a considerable time after the drug is discontinued. (8) By the injection of solutions of calcium chloride, the peristalsis caused by these salts can be entirely inhibited. (9) There is a perfect analogy between these actions and the production and suppression of muscular twitchings and nervous hypersensitiveness. (10) The administration of calclum is, therefore, rational, especially in those cases of diarrhoea in human beings which accompany hysteria or nervous excitability of any sort.

Dr. MacCullum says that while it is difficult to disprove Schmiedeberg's theory, that the absorpiton of fluids from the intestine is retarded by saline purgatives, it is certain that the main factor in the production of fluid or less solid faeces is the increased secretion of

fluid into the intestine. Referring to the possibility of administering purgatives to human beings subcutaneously or intravenously, the writer is of opinion that although in general such methods would be contraindicated, certain cases might arise in which it would be distinct advantage. The present experiments seem to indicate that subcutaneous or intravenous administartion of some of the salts, especially sodium citrate or sulphate, might be safely resorted to. Dr. MacCullum, however, utters a warning against giving barium chloride or magnesium sulphate in this way.

Hiccough.

When hiccough departs from the ordinary, simple, self-terminating affection it may become one of the most obstinate things a doctor can meet—a condition to equally try the patients and therapeutic resources of the best.

When it can be traced to a dependence upon some pathological condition, as occasionally happens, attentions to the primary disease is of course indicated, and usually proves sufficient. But a connection of this sort is found in only a fraction of the cases, making it necessary for the physician to direct entire effort toward the symptom.

Perhaps the most generally useful drug for idiopathic hiccough is chloral, which to an adult, may be employed in doses of ten grains (or even twenty grains) every hour until from sixty to eigthy grains have been used. If after four or five hours the spasms still continue, it will be inadvisable to go on with chloral. Many times a sharp counter-iritation upon the surface of the epigastrium will stop the attack, being employed with or without chloral internally. Counter-irritation may be effected with ordinary household mustard; by chloroform, turpentine, or a hot-water bottle. The simple act of sneezing will sometimes promptly check a hiccough which is a good point to remember.—Medical Times. — *Pennsylvania Medical Journal.*

Fracture of Thepatella Treated by Permanent Extension.

Two cases of fracture of the patella were treated by A. Reuterskold (*Tidskrift i Militar Halsovard*) according to the method of G. Neumann with the result that after ten weeks the fracture was practically healed and the joint movable. After six weeks the patients left their beds and walked with a cane. In one of the cases there was a separation of three to four fingers breadth between the fragments at the time of the accident; the next day the fragments were already closely approximated. The treatment allows masage of the quadriceps and is very easily applied.—*Journal of Military Suregons.*

Neglect Nothing in Diphtheria.

No physician of experience will speak lightly of the danger of this disease, nor will he regard any remedy as effective in all cases. Indeed, the very serious nature of the infection makes all prudent practitioners regard the simplest case with concern and anxiety until convalesence is well established. While noting with much satisfaction the reported diminished mortality of the disease since the advent of antitoxin, we have observed that too many children die of the disease yet, and many of them after having received liberal injections of the serum. This brings us to the point we would wish to impress upon our readers, and that is that no remedy is a specific for diphtheria after systemic poisoning has been established to the point of profound toxaemia. Our time to act is while we have a respon-

sive system to treat, and our best treatment is in preventing the absorption of poison from the infected surfaces, and, secondarily, a resort to such remedies as will prevent the formation and multiplication of the germs of the disease in the blood, not neglecting the heart all the while.

While not as enthusiastic about antitoxin as many of our professional friends who have utmost faith in it, we would say that under its use many remarkable results have followed, and the number of reputable physicians who use it today are enough to justify the most skeptical in giving it a trial. But one of the chief objections to it has been the fact that too many physicians rely upon it too much, and neglect the many things that are indicated in the course of this formidable disease.

As Dr. Waugh, in an able article on this subject in the *Medical Seminary,* says, there is a time when antitoxin will not save life in diphtheria, and when the disease has been active for three or four days it does but little if any good; but there are many things the physician can and should do which may save the life of the child after antitoxin is powerless. He lays special stress upon cleansing and disinfecting the affected surfaces, that auto-infections may be prevented, and the use of calcium sulphide until the child's system is saturated with it.

Our advice is to accept all new remedies that are good and valuable, but to hold on to old ones that have been tried and found not wanting, especially in such a disease as diphtheria.—*Southern Clinic.*

Internal Antisepsis.—J. N. Hall declares that although surgical measures, whenever possible, should be taken for the prevention of sepsis, still there are cases which are seen too late for this or in which prevention as far as known, is out of the question. A case in point is typhoid fever, or sepsis of so-called cryptogenetic origin. In this affection treatment through the blood stream seems at present the only resource. The ability of septic organism to do harm lies not so much in the few that are introduced into the blood stream, as in the capacity of these few to multiply indefinitely. An antiseptic powerful enough to prevent reproduction is not nearly so strong as one capable of destroying the parent organism. It is the young plasmodia of malarial fever which are killed by quinine rather than their progenitors. If we could take the next step their propagation could be prevented. The digestive tract offers a most interesting field for this work. The antiseptic effect of the hydrochloric acid in the gastric juice probably prevents many infections. Comma bacilli in any reasonable numbers cannot survive the acidulated bath into which they are plunged when they enter into the normal stomach. It is interesting just here to note the reported hyperacidity of the digested fluids of carrion-eating birds. The millions of virulent organisms which these birds swallow become harmless. It is stated by an authority that putrefaction does not occur in the small intestines as long as the contents are strongly acid. The use of antiseptics must not be too strenuous. Acute nephritis has developed after the too free use of salol in typhoid fever. Bacteria do not seem essential to digestion, and so there need be no special fear that digestion will be seriously interfered with by destroying intestinal bacteria. Although much may be accomplished by the use of various bismuth compounds, naphthalin, salicylic acid, and other remedies, as yet no generally

accepted intestinal antiseptic has been produced. In the urinary tract the use of antiseptics has met with more success. Investigators have demonstrated the entire disappearance of typhoid bacilli from the urine under the administration of hexamethylenetetramin. Such treatment is imperative, and the results are most gratifying, in almost all cases in which there is reason to fear a destructive process in the kidneys or an ascending infection. The writer has been most impressed with the cases in which there exist certain infections caused by the colon bacillus. Some of these cases which ended fatally, showed abscess formation in the most various localities at post-mortem. In some cases in which urinary antiseptics were given intelligently the urine cleared and recovery took place. The writer believes that these are the most brilliant examples of the influence of internal antiseptics which he has seen. In cases which might be termed "streptococcic consumption" the injection of antistreptococcic serum has been followed by most gratifying results. The writer thinks that there are good chances that there will be discovered some internal antiseptic comparable in its effects with those of the silver salts in gonorrhoeal opthalmalmia. He believes that, judging from the advances in the past decade in internal antisepsis, we can hope for greater discoveries in the near future.—*Medical Record.*

The New Spanish First Aid Packet.

As a result of the knowledge acquired in recent wars, remarks Dr. C. I. de Alarcon (*Revista de Sanidad Militar*) the wounds produced by bullets of small calibre may be considered as practically aseptic, and in harmony with the establishment of the principle that asepsis is preferable to antisepsis in the treatment of clean wounds, Spain has adopted a first aid packet which is sterile or aseptic, rather than antiseptic, and in this end she is followed by Holland.

The new packet as described in official orders, consists of the following:

1st. An outer envelope of impermeable fabric, 12 cm. long and 8 cm. wide, upon which are printed directions. The material is sewn on three sides and the stitching is covered with two coats of rubber varnish.

2nd. An inside envelope of parchment paper.

3rd. Two safety pins, 6 cm. long, wrapped in a bit of waxed paper.

4th. Two compresses, each 10 cm. in length by 7 cm. in width and composed of a piece of absorbent cotton, 5 gm. in weight, between two layers of hydrophilous gauze.

5th. A cotton triangular bandage.

The packets are stored in zinc lined pine boxes, dovetailed, 42 cm. in width by 55 cm. in length, the covers of which are fastened by screws. Each box holds 500 packets.—*Journal of Military Surgeons.*

Drug Therapy.

Abbott, in *N. Y. Med. Jour.,* makes a plea for "Truer Therapy" and more rational treatment of diseases by the proper selection and administration of reliable preparations of drugs." It has become the fashion to deride drug treatment; it has become irreligious to take drugs. The tendency is to surrender to "quackery." We need a revival of faith in drugs, and this revival must be founded on a much needed reform in the drugs themselves, in the methods of their application and a more precise knowledge and clearer conception of their physiologic and therapeutic action. The old-fashioned "shot-gun" prescrip-

tion should be relegated to oblivion. He believes that the development of the so-called "therapeutic nihilism" is due to the loss of confidence in medical methods of treatment, which in turn results from failure to obtain effects by the administration of unreliable preparations of drugs. He believes that error in dosage will often cause failure of the remedy, and hence the necessity for obtaining an accurate rule for dosage. Such a rule is "give to effect, disregarding quantity." This rule is a perfectly safe one to follow if the physician uses trustworthy preparations. To obtain accurate results he believes in the use of active principles rather than trust to the uncertainty of the preparations of the crude drugs.—*Journ. A. M. A.*

Medical Treatment of Constipation by the Injection of Olive Oil.

G. Herschell believes that in suitable cases and a proper technique for the injections, that olive oil is a most useful remedy in constipation. Results of a gratifying nature follow in chronic colitis, constipation associated with spasm of the bowels, as in neurasthenia and in atony of the intestine, here combined with the use of electricity. From three to ten ounces of oil should be injected at bed time and retained overnight. It should be slowly introduced by the force of gravity. He prefers a glass funnel hung in a metal frame and connected by a rubber tube with a nozzle of large bore and well-rounded tip. A spring clip regulates the flow. The amount at first should be restricted to five or six ounces, but this can gradually be doubled. After a while the injections can be given on alternate nights only. —*Med. Record.*

For the Removal of Wax in the Ear.

Hardened wax in the external ear can often be removed readily by injections of warm water and soap, soda, or ammonia. Many cases resist this and require the softening effects of glycerine or sweet oil for a day or two before syringing. Do not bother with these long processes, but use a half-strength solution of hydrogen dioxide in the ear for about five or ten minutes. This will disintegrate the hardest plugs and they can be removed with very little syringing. I have yet to see the case in which this process has caused irritation or inflammation. Do not use too much force with the syringe. Wipe the ear perfectly dry with absorbent cotton and apply petrolatum. Wear a small plug of cotton in the ear for one day after removal.—*Southern Clinic...*

An exchange says one of the more striking experiments performed with the new *n*-rays are more wonderful than the recent investigation by Becquerel, in which he has ascertained that certain inorganic bodies, such as calcium sulphide, which emits these rays after having been exposed to sunlight, when subjected to the influence of an anesthetic, cuch as chloroform, ether or nitrous oxide, lose this power. A few months ago Meyer found that this would happen with plants, but that an anesthetic should effect an inorganic substance is an entirely different matter, and brings up a new and difficult question for scientists to answer. It may even mean the breaking down of the line between organic and inorganic substances, and that the *n*-rays are the result of certain vital processes which anesthetics may check. In other experiments of a similar nature it has been found that the variations of the *n*-rays produced by the nervous centers, as in-

ïicated by the glowing of the phosphor-escent screen on which they were re-ceived, enable an observer to follow the action of an anesthetic and to determine when danger to life begins, since it is possible to distinguish readily the point of death. The development of this ex-periment will doubtless afford an inter-esting method of studying anesthesia, and it may be possible to use it to indi-cate the time necessary for employing restorative measures when a patient is under the influence of an anesthetic. Such a use in the light of present ex-periments is the barest possibility, but it indicates a field that may be opened up by this new discovery.

Chloroform Anaesthesia.—Moore in British Medical Journal describes ex-periments up the formation of easily dissociable compounds or aggregates be-tween chloroform and the proteids of the blood and tissues. The results ten-ded to show that the production of an-esthesia was due to such aggregations; the activities of the protoplasm were thereby limited. The combinations only existed so long as an adequate pressure or concentration of th anaesthetic in solution was maintained; as soon as the pressure fell, the compound or aggre-gate dissociated and the cell became free to take up once more its normal activities. The existence of such com-pounds or aggregates was shown by (1) the greater solubility of chloro-form in serum or haemoglobin solutions than in saline; (2) the fact that with equal concentrations the pressure of the anaesthetic was much lower in the case of serum or blood than in the case of water or saline solutions; (3) obvious changes which occurred in serum or blood and demonstrated an interaction between the proteid and the anaesthetic. With increasing proportions of chloro-form in the inspired air a more than proportional amount was absorbed by the blood. As regards the action of chloroform upon cardiac and cerebral tissue, it produced its effects by acting upon protoplasm and not upon such substances as lecithin.—*New York*

Vitality of germs of diptheria for a long time, has been demonstrated by the report of a health officer in Mecosta county to the secre-tary of the Michigan State Board of Health, who states that twenty years ago, Mrs. T. lost a daughter by death from diphtheria, and then some of the girl's clothing was put away in a chest and nailed up. The chest was not disturbed until this spring, when the mother, 75 years of age, opened it and looked over the clothing, soon after which she was taken sick with diptheria and died, June 17, 1904. The health officer believes she contracted the dis-ease from the clothing, infected twenty years ago.—*Buff. Med. Journal.*

Infantile Convulsions.

Jacobi recommends the following pre-scription for infantile convulsions:

℞.	Chloral hydratis.....gr. iv	25
	Potassii bromidi....gr. viii	50
	Syrupi simplici	
	Aquæ destil., ää.....℥i	4
M.	Sig.: One dose for child two years old.	

—*Journal American Med. Association.*

Dr. Vollbreicht, of Darmstadt, Ger-many, accepted the invitaion of the Sul-tan of Turkey to take general charge of medical affairs in Turkey.

The Chicago Department of Health in its current Bulletin claims that Chi-cago is the most healthful large city on earth.

Bronchial Asthma.

The following antispasmodic combinations are recommended by "Text-Book of Applied Ther." in the treatment of bronchial asthma:

℞.	Morphinæ valerianatis..gr. i	06
	Elix. ammon. valeren.	
	Spts. chloroformi, ää ... ʒvi	24
	Syr. tolutani q s. ad . . ʒii	60

M Sig.: One teaspoonful every half hour until relief follows: or;

℞.	Tinct. belladonnæ..... ʒi	4
	Spt. chloroformi ʒvi	24
	Syr. altheæ q s ad ʒii	60

M. Sig: One teaspoonful every half hour as required

—*Journal American Med. Association.*

Prince Oscar, the youngest son of the German Emperor, is said to be suffering from an affection of the throat, probably tuberculous in nature.

The newspapers report that Prof. Redard of Geneva, Switzerland, has discovered that teeth may be extracted without pain by first shutting the patient in a dark room and exposing his eyes to the blue light of 16 candle power for 3 minutes. It is claimed that blue light is very "soothing" to the nerves.

Newer Materia Medica.

The Treatment of Asthma.

By E. C. Underwood, M. D.

There is possibly no disease condition which entails more distress than asthma. One of my patients who, despite the suffering entailed by asthma could not refrain from using a limited allowance of air, told me that since he had begun to have asthma life was nothing more than a late-day riding-horse, a modern Sinbad. The writer told another patient that Loomis and other great writers declared that asthma did not tend to shorten life. This was intended to encourage the patient and enable him to more lightly carry his heavy burden. To this the patient declared that if my treatment failed to cure him and the disease held on, he fondly hoped that a shotgun especially prepared for the occasion would prove efficacious. These anecdotes tell in light vein the heavy burden that these patients carry. In fact, asthma renders a person an invalid, and the slightest indiscretion often is sufficient to bring on an attack that is most distressing. The treatment of asthma concerns us with indications that are fitting during the attack, and those which are to be employed in the interval with a view of preventing recurrence of attacks. During an attack of dysponea the patient gasps for breath, desires to be fanned and to have all of the windows opened. To relieve this nothing is so efficacious as bromidia—a full teaspoonful given when the attack is beginning to come on, or as earlyafter it has appeared as possible. Often when there is any pain associated with the attack, a teaspoonful of papine may be added to the dose of bromidia. Again, it often appears that papine aids the action of bromidia. Certainly these remedies act more quickly than any other means known to the writer in relieving an attack of asthma. I have for a long time had my patients to burn nitre paper near their face during an asthamatic attack, and this has proved very helpful. Nitre paper is easily prepared by immersing ordinary blotting paper in a saturated solution of nitrate of potassium. After it is thoroughly wet it is taken out and allowed to dry. Then it is cut into squares of about three inches. One of these is burned and the smoke inhaled during an asthamatic attack. Some writers advocate the hypodermic injection of morphine for these attacks of dyspnoea, but this

will prove of little value often, and there is practically no need for it when we use bromidia alone or in combination with papine. In all cases of asthma it is absolutely necessary to use in the interval between the attacks such a remedy as will exert a curative action on the morbid process which underlies the asthma. There are two remedies which are useful above all others in the treatment of this disease. One of these is curative in its action, and the other is only intended to exert a tonic action on the system. Iodide of potassium has found the greatest degree of favor with the profession, and it is depended upon to establish a cure by the most able men in practice. Yet iodide of potassium as we find in the drug stores is not the agent that will all the time bring us satisfactory results. This is so because much of the iodide of potassium in the drug stores is very impure; and then if it happens to be pure, we shall find it to produce iodism and soon become intolerant to the patient. It is a question of burning importance to the patient to prevent such circumstances from happening. It has long been known that iodide of potassium if chemically pure can be taken for a longer time, and, if combined with certain vegetable alteratives, its action is far more satisfactory in every respect. In fact, when iodide of potassium is associated with the active principles of stillingia and other alterative drugs of positive and well known value, as we fiind iodia, we can get the best results. In fact, iodia has no equal as a remedy in the treatment of asthma, and it has a large following with the most intelligent members of the medical profession. In iodia there is in each teaspoonful five grains of chemically pure iodide of potassium along with a combination of the active principles from the green roots of stillingia, helonias, saxifragia and menispermum. Iodia should be given in doses of a teaspoonful before each meal (about an hour before meals), and this should be persisted in for several months. If these patients are reduced in health, I have found it highly beneficial to give some preparation of cod-liver oil. One of the wines of cod-liver oil often serves us admirably in these cases. I do not agree with some writers who decry the wines of cod-liver oil. The results which I have gotten from them is from articles which are genuinely meritorious. In asthma these agreeable preparations are most appropriate, since it is not desirable to burden the patient's digestive powers any further than this is necessary. The cod-liver oil then is given long enough to give the patient strength and add to his weight. Iodia I say should be continued for some time. After it has been employed for some weeks the general condition of the patient, as regards the recurrence of attacks of asthma, will be so greatly improved that we may have some difficulty in getting our patient to continue the employment of the remedy. In instances like this we must tell the patient that no permanent results can be expected unless he brings himself to continue the employment of the remedy until it has had sufficient time to exert its alterative action and in that way affect a cure. If there should supervene in the course of treatment any soreness of the throat or any other symptom of iodism, we may reduce the dosage of the iodia to one-half for a week or ten days, or leave it off for a time, say a week and then resume. With iodia, however, iodism is a rare occurrence, but may of course, occasionally occur.—*New Albany Medical Herald.*

Sanmetto in the Catarrh of the Benito-Urinary Organs in the Female.

Recently I had occasion to try Sanmetot in catarrh of the genito-urinary organs in the female. The patient was a young married woman, thirty years of age, the mother of five children. She complained of scant but frequent urination. I made examination and found irritable bladder with acid urine and offensive sedimentary deposit. I gave a prescription of copaiba, potash, lavender and lithiated hydrangea, which did some good, but did not give me satisfaction. When Sanmetto occurred to me I added a whole bottle of it to my prescription; then my patient began to make rapid improvement, and within a week was well. Her husband told me afterwards that the medicine had infused new life into her, and that her erotic powers had greatly increased, and that for which she always formerly had an aversion was now made a pleasure to her. I think there is no better medicine made where the same is indicated.

MAX SMITH, M. D.

Pages Mills, S. C.

Sanmetto in Prostatitis of Gonorrheal Origin in and Frequent Micturition of Old Men Due to Prostatic Trouble.

While I am inclined to fight shy of proprietary preparations, I must admit that my first trial of Sanmetto was so satisfactory that I have since prescribed it a number of times. It acts like a charm in prostatitis of gonorrheal origin, and it was in two very severe cases of this type that I obtained the best results. In the frequent urination of old men, due to prostatic trouble, Sanmetto is without a peer, at least in my experience.

WM. H. SMITH, M. D.

A Reliable Agent.

Among the remedies for bronchial affections, which have stood the test of years, is Fitchmul. It has not been widely advertised, but its merits has made it so much enquired for that it is more than probable that its field of usefulness will be greatly extended.

Fitchmul contains the active principles of Fir Balsam, Venice Turpentine, Chloric Ether, with a minute quantity of Hydrocyanic Acid, Tartar Emetic, and Aromatics. This is equivalent to saying that it is indicated in bronchitis, broncho-pneumonia and other bronchial affections which are peculiarly prèvalent during the months of winter and spring. Fitchmul is not a cure-all but it can be relied upon, according to reliable physicians, to remove the most distressing coughs.

We quote from a paper "Consumption a curable disease" written by N. B. Shade, M. D., Washington, D. C., and published in the Medical Summary

"Fitchmul seems to have a specific effect upon the mucous membrane and in addition to liquifying the sputa and relieving the cough, it is apparently the only remedy I ever prescribe that has the effect of superinducing a healthy circulation in the lung tissue and facilitating the phenomenon of endosmosis."

Recent Clinical Reports and Physicians' Samples free. The Fitchmul Company, Concord, N. H.

Comment on Antikamnia and Heroin Tablets.

Under the head of "Therapeutics," the *Medical Examiner*, contains the following by Walter M. Fleming, A. M., M. D. regarding this valuable combination: "Its effect on the respiratory organs is not at all depressing, but primarily it is stimulating, which is

promptly followed by a quietude which is invigorating and bracing, instead of depressing and followed by lassitude. It is not inclined to affect the bowels by producing constipation, which is one of the prominent effects of an opiate, and it is without the unpleasant sequels which characterize the use of morphine. It neither stupefies nor depresses the patient, but yields all the mild anodyne results without any of the toxic or objectionable phases.

When there is a persistent cough, a "hacking,' 'a "tickling" or irritable membrane, accompanied with dyspnoea and a tenacious mucous, the treatment indicated, has no superior. In my experience I found one "Antikamnia and Heroin Tablet" every two or three hours, for an adult, to be the most desirable average dose. For night coughs, superficial or deep-seated, one tablet on retiring, if allowed to dissolve in the mouth will relieve promptly, and insure a good night's rest. In short, it will be found futile to delve for a more prompt and efficient remedy than "antikamnia and heroin tablets" in all bronchial complications with laryngeal irritation ,dyspnoea, winter-cough and general irritablility of the thoracic viscera."

When to Operate in Appendicitis.

Now or later? That is the question. While undecided use Antiphlogistine. Spread warm and thick over the abdomen and cover with absorbent cotton and a suitable compress. When used early the inflammation is often resolved, the attack is cut short and operation becomes necessary. The dressing should be renewed when it can be easily peeled off, generally in 12 to 24 hours.

Pennsylvania Pronounces it Wholesome

Recently a direct effort was made to frame legislative measures which would presumably exclude Vin Mariani from sale in the State of Pennsylvania. The State Board of Health promptly took up the problem. They employed two of the most prominent chemists of Philadelphia, namely, Professor Samuel P. Sadler and Dr. F. A. Genth, who, after critical analysis of Vin Mariani, made from purchases of their own selection, failed to find pure cocaine in demonstrable quantity. This not only refutes the absurd falsity of suspicion that any alkaloid is surreptitiously added to the wine, but confirms, in the most convincing manner, the results of numerous former analyses made by the Governments of France, Germany, Russia, and also in the United States. Each of these analyses admits the absolute purity of Vin Mariani as a preparation of true Coca leaves in a sound and nutritious French wine. At the Pennsylvania State Board of Health officially expresses it: Vin Mariani is not a cocaine preparation, but a wine possessing the aromatic and desirable qualities of fresh Coca leaves."—*The Coca Leaf*, November, 1903.

Practical Prescriptions and Applications, Etc.

R Camphor 1 gram
Salol 1 gram
Betul-ol (Methyl-Oleo-Salicy) 2 grams
Chloralhydrate 50 centigrams
M. et ft. applic.

This is an antiseptic treatment which is easily applied on dilating the cervical cavity. Hot injections of 1 per cent. of Hux-Sal are recomended to thoroughly cleanse the parts before this application.

MEDICAL NEWS AND ITEMS.

Work has begun on the new $50,000 quarantine hospital at Buffalo.

Reports from Mexico say the republic is practically free from yellow fever.

Robert Koch retired October 1 from the position of director of the Institute for Infectious Diseases at Berlin.

The jury in the trial of Dr. Julian M. Baker for killing Dr. Bass returned a verdict of justifiable homicide.

The degree of doctor of laws was recently conferred upon Dr. William Osler by Harvard University, and upon Dr. William Halsted by Yale University.

The total number of deaths in Michigan reported to the Department of State for the month of June was 2,445, a decrease of 429 from the preceding month.

According to a statement issued by Dr. Edward Martin, Director of the Department of Public Health and Charities, the city of Philadelphia is, for the first time in three years, free from smallpox.

The fortieth anniversary of the introduction of subcutaneous injections of calomel in the treatment of syphilis was celebrated recently in Italy. A committee consisting of Drs. Domenico Maiocchi, Ambrogio Bertarelli, and Mario Truffin, with Prof. Camillo Golgi, Rector of the University of Pavia, as honorary president, presented a gold medal to Dr. Angelo Scarenzio, to whom is atributed the invention of the method.

Dr. E. R. Rost, I. M. S., is reported by an exchange to have prepared a specific remedy for leprosy, similar in its mode of elaboration to tuberculin, which he calls "leproline." At the present time over 100 cases of leprosy are being treated in Burma by injections of leprolin, and the treatment is also being tried in other places in India. Dr. Rost claims that four of the 100 patients treated in Rangoon have been cured, and in the great majority of those still under treatment the improvement is marked. Rich cultures of the lepra bacillus, for the preparation of leprolin, are obtained from bouillon deprived of its sodium chloride and other salts.

Recently, says an exchange, several foreign missionary societies in this country and England agreed to establish jointly a school of high rank in China for the instruction of natives in the principles of modern medicine and surgery. In accordance with the scheme a medical college is now under construction. The cost is estimated at $50,000. Toward this the Dowager Empress has contributed about $6,000. Subscriptions are now being sought from high Chinese officials, who are expected to follow the example of the Empress. There will be a five-year course, and the school will have authority to confer the degree of doctor of medicine upon students who complete this course and pass the examination successfully. The training will be regardless of creed, but the bulk of the students will be naturally Christians.

Koch's ideas in regard to the prevention of the spread of typhoid fever by stamping out each focus has been carried out, according to an exchange, on a large scale in Alsace-Lorraine and other western provinces. Five superintendents of these stations, with other specialists and physicians of the region, met at Berlin June 29 to ascertain what had been learned and accomplished in regard to the eradication of the foci of typhoid fever. The assemblage was unanimous in decreeing that persons ex-

hibiting typhoid bacilli in the urine or stools, with or without other symptoms or in apparent perfect health, should be isolated, if convenient, and if not, at least their excreta should be disinfected, as also their bed and body linen. The assemblage included R. Koch, Gaffky, Kruber of Munich, and Forster of Strasburg.

The New York Tribune says that army medical officers will make important tests in medical supplies transportation in the course of the joint maneuvres of the army and militia in September at Manassas, Va. They contemplate the employment of the army mule as a means of getting to the firing line the supplies for the first dressing station. Hitherto these supplies have been carried in ambulances. But of course that vehicle cannot break into column troops, and there are places in a rough country where troops are apt to be operating that the ambulances cannot go. In the Santiago campaign there was great difficulty in transporting these supplies, and about the only means of getting them to the front was on the backs of the hospital corps men. This, of course, was unsatisfactory and operated as a hardship on the hospital stewards. It is believed that the army mule can go wherever troops are stationed, and this facility will add to the efficiency of the medical department in the field.

The climate of the west coast of Africa has always been renowned for its deadliness, and much has been written concerning it in the medical and lay press. The British Medical Journal has recently published an article by a correspondent on the life and its risks there. Special emphasis is laid on the poor condition of the dwellings in which government officials have to reside, and the want of opportunities for relaxation and amusement. There is a considerable amount of truth in some of the statements, but after all one must remember that the pay is high and life is better than in other tropical colonies. Much of the disease which used to exist can now be avoided if people will follow out a careful mosquito prophylaxis based on the recent researches into the etiology of malaria, and there is not the slightest doubt that the sanitation and health of the coast is improving year by year.

Helmboe, of Norway, stated at the recent international Anti-tuberculosis Conference, says the Journal of the American Medical Association, that small sanatoria were being constructed in the various communities in his country and temporary aid supplied to families fighting tuberculosis, the funds being derived from the profits of the government monopoly of the liquor trade. Brouardel, of France, stated that the French Anti-tuberculosis Federation now groups thirty-eight different organizations or institutions founded by private initiative, besides the public institutions. A committee comprising von Schrotter of Germany and Landouzy of France was appointed to draw up a general schedule for study of the predisposition to tuberculosis, so that physicians of all countries can work along identical lines. Leon Derecq was entrusted with the task of preparing a model of what he calls the individual sanitary pass-book (livret sanitaire individual populaire). Details in regard to diseases, environment, etc., are to be noted down under proper headings, thus forming the nosologic tree of the family and individual, like the genealogic tree. The advantages of special anti-tuberculosis dispensaries are being proclaimed more and more. The one founded by Calmette

at Lille is serving as a model, and others are now planned at Berlin and elsewhere in Europe. The Germans have coined the term "Fursorgestellen" for them. They are not intended to conflict with any of the measures and institutions already in existence, but merely to try to do what they necessarily leave undone. They require the cooperation of charitable persons or societies in order to acomplish their aims.

Drug Counterfeiters Arrested.—The police of this city arrested last week a gang of men charged with counterfeiting certain patent medicines and prprietary coal-tar analgesics and hypnotics. Millions of pills put up in imitation of a popular patent medicine, were seized, and also vast quantities of spurious coal tar products; among the latter were some tried remedies in constant employment in legitimate medicine. Samples of the "fake" stuff were obtained, it is alleged, at over 1,500 drug stores in this city and vicinity. These arrests are the result of a long and patient investigation extending over nearly nine years. The authorities say that they have now in their possession sufficient evidence to show exactly how the swindlers worked. There are charges enough against several men to give them long terms of imprisonment if convictions follow the well-planned arrests.—*Medical Record.*

Wholesale Poisioning by Wood Alcohol.—In a limited area on the West Side of this city upwards of thirty men and women have died within the past three weeks. it is believed of poisoning by amyl alcohol. Most of them were known to have drunk heavily of whiskey purchased at a certain saloon, one of the barkeepers of which was also one of the victims. It is supposed that the whiskey was doctored stuff, the basis of which was wood alcohol, flavored with various chemicals. The police, health department, and the coroner are all investigating the cases, and analyses are being made of the gastric contents of the dead and of the liquor found in bottles in the rooms formerly occupied by them.—*Medical Record.*

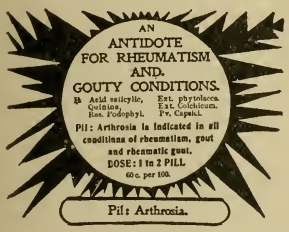
Dr. Osler Goes to Oxford.

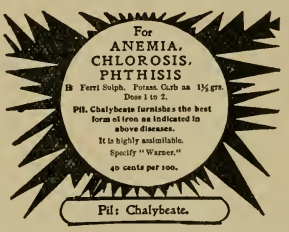
The announcement is made by cable from London that, with the approval of King Edward, Dr. William Osler, now of the Johns Hopkins University, Baltimore, has been appointed Regius professor of medicine at the University of Oxford, in succession to Sir John Burdon-Sanderson. This news will be received with deep regret by a host of friends and admirers of Dr. Osler in this country, who have long looked on him as one of the leaders in American medical thought. Dr. Osler has passed all his professional life as a teacher of medicine, a vocation for which he is eminently qualified by his broad culture, profound medical learning, and an inborn gift of expresion. He was born in Tecumseh, Ontario, in 1849, and was graduated in medicine from McGill University, Montreal, in 1872. For ten years, from 1874 to 1884, he was professor of the institutes of medicine at McGill from 1884 to 1889 he was professor of clinical medicine at the University of Pennsplvania, Philadelphia, and since 1889 he has held the chair of medicine at the Johns Hopkins University, Baltimore. We beg to offer our congratulations to the new Regius professor of medicine at Oxford, and at the same time to send anticipatory greetings to Sir William Osler, Bart. The Oxford School of Medicine is also and especially to be congratulated.—*Medical Record.*

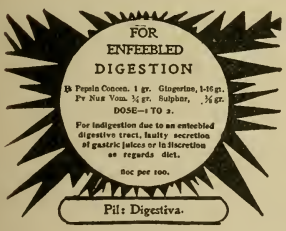
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Clavus.—Thornton treats corns by nightly application of salicylic acid, ten grains to two drams of cerate.

Periodic Headaches.—These forms (*Alkaloidal Clinic*) are generally relieved by picrotoxin, grain 1/134 every two to four hours, or three times a day.

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For Hepatalgia.—The paroxysms are relieved (*Alkaloidal Clinic*) by glonoin and atropine, grain 1/250 each, every five minutes in hot water until face is red.

Uterine Bleeding.—The persistent oozing (*Alkaloidal Clinic*) that follows puerperal hemorrhages may be checked by hamamelin, grain 1/6 to 1 every hour or two.

For the First Stage of Pneumonia.—Re. Ext. digitalis gr. ¼;pulv. ipecac. gr. ii: A pill every two or three hours.—Shoemaker.

Passive or Hypostatic Congestion of the Lungs.—Re. Ergotini gr. 1/3; ext. digitalis gr. ½; pulv. ipecac comp. gr. ii; A pill every three or four hours.—Shoemaker.

Pulmonary Embolism.—Anders recommends absolute rest of body and relief from distressing symptoms; atropine and morphine for pain and dyspnea; and special etiologic treatment.

Hemoptysis Due to Wound.—Heath employs turpentine inhalations from a handkerchief; ice internally and externally; venesection; and lead acetate or gallic acid.

For Callosities.—Centrell advises to apply for 48 hours an ointment of salisylic acid, one dram to the ounce of cold cream. Curette and renew the application night and morning for several days.

Cariac Disease With Accelerated Pulse.—Re. Ext. verat. vir. fl. m. i; ext. ergotae fl. m. iv; acidi sulph. arom., m. iv; aquam q. s.: A half teaspoonful well diluted every half hour as long as needed.—Howe.

Syphiloderma Tuberculosa. — Lydston directs to apply locally a solution of five or ten grains of mercuric chloride to the ounce of compound tincture of benzoin or colludion, in addition to the general treatment.

Pneumorrhagia of Pulmonary Agoplexy or Bright's Disease.—Anders advises absolute rest in the horizontal posture, the internal and external use of cold, and cardiac stimulants with onset of collapse.

Aneurysm.—In early cases Osler advises absolute rest and very low diet with restrictions of fluids, avoidance of constipation and straining, and the administration of potassium iodide ten to twenty grains three times a day.

Interlobar Pleurisy.—Copious and repeated hemorrhages may occur, though the patient is not tuberculous. If evacuation of pus is incomplete, as shown by persistence of fever and symptoms of infection, Dieulafoy states that prompt surgical intervention is indicated.

The Biggest Man in the World.—An editorial note in the May number of *Medicine* refers to the recent death of Thomas Longley, a Dover citizen, who was over six feet in height, 70 inches around the chest, 85 inches around the waist, and weighed 664 pounds .

Ferropyrine or Ferripyrine.—This local hemostatic (*Medical Critic*) contains 64 per cent. of antipyrine and 36 per cent. of ferric chloride. It is an

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orange-red non-hygroscopic powder, soluble in water or alcohol. It may be used pure or 20 per cent. solution.

Sunlight and Warts.—According to *Semaine medicale,* for September 7, 1904, a Russian physician, Naoumov, of Kazan, succeeded in removing a number of warts from his hands by simply concentrating upon them the solar rays for a period of some thirty seconds, with a convex lens from his ophthalmoscope. He found that the nutritive bloodvessels of the warts became occluded and that the latter, therefore, soon atrophied. A slight induration of the skin remained after the warts had fallen off, only to disappear in its turn after a week or so. The Rontgen rays will destroy warts as is well known, but Naoumov's method is applicable by the humblest practitioner.

Indigestion.—Presse medicale, for September 21, 1904, recommends:

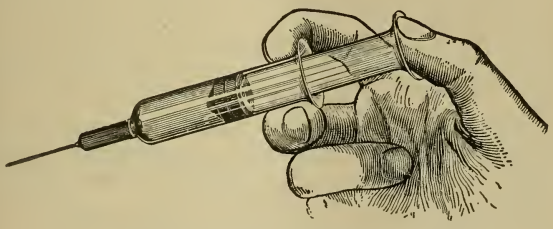
℞ Pepsin, Pancreatin, Diastase } of each 20 centigrammes (3 grains);
Calcium glycerophosphate... 10 centigrammes (1½ grain);
Powdered nux vomica.. 2 centigrammes ($\frac{3}{10}$ grain).
M. For one capsule; one after each meal.

Injury to the Cervical Spine.—Perfect rest, says Herbert W. Page, is the chief consideration. Asepsis for wounds is in order, and hot flannels or linseed poultices for sprains. Ice locally—and ergot or gallic acid internally areindicated for hemorrhage.

Passive Pulmonary Congestion.—Hamamelis is claimed to be almost a specific for venomous hemorrhage. Bruce uses venesection, leeching or cupping and purging, and does not try to check the bleeding from the lungs. He recommends digitalis and similar remedies for slight hemoptysis from a weak right heart.—*Denver Medical Times.*

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Restores normal action to the eliminating organs; hence, the remedy for all pathological conditions with dry skin and dry secretions.

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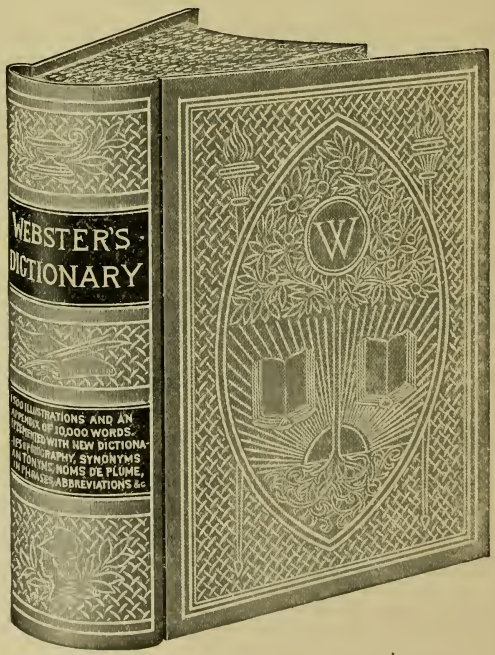
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The Physician's Fee.—A Philadelphia judge has given expression to the opinion that "the life of a rich man is worth more than the life of a poor man, and the physician has the right to charge the millionaire more for his services than he does the laborer." He went on further to say that "the physician is unlike the merchant, who has goods of different quality to sell at various prices. He must give his best service in every case. But it does not follow that the service is worth the same in every case. Human life has a pecuniary value of variable quantity, greater in the millionaire than in the laborer. Thus, the practitioner of common sense has a maximum and minimum charge, and makes not his bills to suit the pecuniary circumstances of his patients." From this view there will be no dissent on the part of right-thinking people.—*Medical Record.*

Prevention of Tetanus.—The members of the Academy of Medicine of Cincinnati have taken steps looking toward the suppression of the toy pistol and blank cartridge, which, in this section of the country at least, have been the cause of many sad deaths from tetanus. The Fourth of July celebration always has its list of victims. In the past year there were five in Cincinnati alone. The patients are of course usually young and vigorous boys, who but for these dangerous toys should have grown to be useful citizens. The Academy has, through the Health Officer, Clark W. Davis, placed a resolution before the City Council requesting that an ordinance be passed making the sale or use of toy pistols, blank cartridges, and torpedo canes an offense against the statutes.—*Medical Record.*

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Indications: Croup and all non-specific exudative affections, La Grippe, bronchitis, phthisis, glandular affections, etc. It is simply a marvel.

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REGIONAL MINOR SURGERY by George Gray Van Schaick, Consulting Surgeon to French Hospital, N. Y. Second edition, enlarged and revised, 228 Pages Bound in Cloth, Profusely Illustrated. Price $1.50. International Journal of Surgery Co., New York.

The practicability and usefulness of this book is best indicated by the demand, necessitating a second edition in an unusually short time. This edition has been subjected to a thorough revision and additional chapters have been added.

The author's object, to furnish the general practitioner with such practical information on Minor Surgical Conditions as will be of the greatest service to him in his daily practice has been well accomplished. He has the happy faculty of describing an operation in a few brief sentences and of making the whole perfectly clear to the reader. The surgeon, as well as the general practitioner will obtain many useful suggestions by a careful study of its pages. Subjects of a technical character have been avoided, and only the most applicable methods demonstrated by twenty years' private and hospital experience are presented. The book is liberally illustrated with original sketches and is so eminently practical and useful, we believe it will run through many more editions.

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"While 'Standard Oil' has been so scientifically spreading abroad the impression that the public should never own its stock," says Thomas W. Lawson in the October instalment of 'Frenzied Finance' in *Everybod's Magazine,* "secretly they have been engaged in exchanging that stock for the securities of the people in the form of banks and trust companies, railroads, and other assets of definite value. So completely has 'Standard Oil' pulled the wool over the eyes of the votaries of finance that there cannot be found in or out of Wall street a single financier who would not laugh to scorn the suggestion that 'Standard Oil' is engaged in a campaign for the distribution of its Standard Oil stock to the public. Yet pin your great financier down to the facts, and he'll admit that he himself has quite a block of the stock, and that institutions of which he is a director include among their assets in one form or another good sized parcels of the inestimable security. But so firm is the belief of these very

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Practical Treatise on Geni to-Urinary, Etc.

The author states that in preparing the third edition he has endeavored to present a practical, up-to-date, and compact treatise; that his aim has been to avoid both the tediousness of an encyclopedia and the disappointing brevity of an epitome. We feel that Dr. Taylor has succeeded admirably in his endeavor. It has been a source of real pleasure for us to review and to read his clear and terse descriptions. The various genito-urinary affections have received full consideration. Due attnettion has been paid to the description of the different operations upon the genito-urinary system, and the various new operative procedures are also given. In all matters relating to treatment, surgical or medical, the author has presented wholesome, conservative, and practical directions; and while a surgery proper has received full consideration, it has been recognized that its performance is but a part, and not the one aim of therapeusis. The subject of gonorrhoea in all its phases has been exhaustively given, with full, practical and judicious treatment. Syphilis in all its conditions and relations has been been comprehensively considered, and much care exercised in the concise presentatiton of a practical, methodical course of treatment. The illustartions are numerous and good, twenty-five new illustrations and twelve colored plates having been added to this edition.

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The Habits and Diets of the Japanese Soldiers.

It is a remarkable circumstance that the Japanese trops in the field have not been attacked by an epidemic of typhoid fever, cholera, or plague, considering the conditions under which they live. The Japanese soldiers are crowded into the houses of the country, which are small and ill-ventilated. The Koreans and Manchurians know nothing of sanitation and care less, and it is certain that if Caucasian troops had undergone an ordeal similar to that to which the Japanese soldiers have been subjected during the past few months, a pestilential epidemic would have been the result and deaths would have occurred by the thousands. The Manchuria correspondent of *Leslie's Weekly* thinks that the Japanese are less susceptible to the attacks of disease germs than are Caucasians, but is of the opinion that there are other reasons which explain their freedom from disease. To begin with their diet is extremely plain and simple, consisting chiefly of rice, salt fish, and unsweetened tea. Other civilized armies, on the contrary, when on service, eat highly concentrated and heating foods. They drink large quantities of stronge coffee and gorge themselves with hardtack, bacon, canned beef, and jam, bringing on a whole train of stomachic and intestinal troubles and lowering the system generally. The men thereby lay themselves open to danger of contracting various diseases. Again, the Japanese soldier always drinks boiled water or a very weak concoction of plain hot green tea. Unlike American and British soldiers, upon taking possession of a town the Japanese fighting man does not proceed to drink to excess; he is temperate to a degree, and indulges in no alsoholic stimulant but his mildly alcoholic sake. Thus by careful diet his body is in good physical condition and fitted to resist the onslaughts of disease.

Resolutions of Respect.

Whereas it has pleased Almighty God in the exercise of His inscrutable wisdom to take from the field of his labors our senior member, Dr. D. N. Patterson; therefore be it resolved:

1. That we bow in humble submission to this manifestation of the Divine will.

2. That in the death of Dr. Patterson the Richmond County Medical Cociety has lost an honorable member, the Church a faithful communicant, the State a useful citizen and his family a fond parent.

3. That the secretary be instructed to engross these resolutions upon a page of the minutes and to forward a copy to the family with the deep sympathy of the society.

4. That a copy be sent to the Anglo-Saxon, the Richmond Headlight and the Charlotte Observer with request to publish.

J. M. Ledbetter, M., D. L. D. McPhail M. D., W. P. Webb, M. D., Committee.

Rockingham, Sept. 20, 1904.

Local Anaesthesia for Inflamed Tissues.—A valuable local anaesthetic for inflamed tissues can be had by adding a few drops of 1-1000 solution of adrenalin to a ½ to 1 per cent. solution of cocaine. In injecting this, the first result is an anaemia of the skin, due to its action on the vasoconstrictors, followed by a deep anaesthesia. Incisions can be made into inflamed tissues with the loss of very little blood, and the method is well adapted for furuncles, anthrax, etc. —*Medical Record.*

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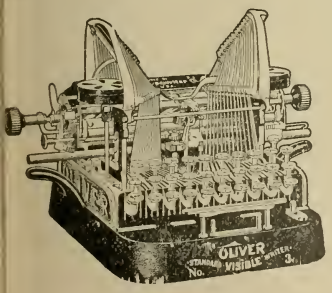
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Diseasee germs more readily float in dry air than an atmosphere charged with moisture. In preparing a room for operation the use of steam will tend to purify the air by causing germs to fall to the floor, which it is advisable to moisten or to cover with damp sheets.

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In operating on a Chinaman it is always prudent to find out whether he is in the habit of smoking opium before beginning. If this be the case he may need a considerable amount of morphine for some time after the operation, which would otherwise be complicated by the distressing effects of sudden withdrawal of opium. The time just after an operation is not the one to be selected for curing the morphine habit. This also applies, of course, to the white opium eater, but the latter, unlike the Chinaman, will very soon let you know his needs.—International Journal of Surgery.

If compelled to give iodide of potash in large doses it will often be borne best when given in milk, which may be peptonized. This is especially frequently the case with women or children.

The Cocaine Habit Among the Negroes of the South.—Reference has been made frequetly of late to the increase of the drug habit in the United States and in the civilized world generally. Cocaine is consumed throughout America much more largely than ever before, and the statement has been recently made on good authority that the cocaine habit has gained a strong hold on the young negroes of the South. The manner in which these people have acquired the pernicious habit, is said to have been when working in industrial establishments in Pittsburg, where nearly all the negroes of both sexes take the drug, and those who return to the South teach those who have remained there to use it. The evil effects following this practice among negroes in certain parts of Virginia have become so notorious, that in the city of Staunton the judge of the Corporation Court a short time ago, gave the matter in a charge to the grand jury for investigation.

The result of the investigation has clearly shown that the gravity of the situation as regards the cocaine habit among the young negroes had been in nowise exaggerated. It was found that cocaine-taking in the form of a powder used as snuff was extremely prevalent among this class, and that the outcome in many instances had been deplorable. Offenses of a criminal nature had largely increased, the majority of the offenders being young negroes addicted to the cocaine habit and known as "coke" fiends.

In Virginia there are no restrictions regulating the sale of cocaine, and in consequence it can be more or less easily procured. A movement is said to be afoot to secure restrictive legislation in Virginia, in order to check the indiscriminate sale and use of this harmful drug.

There certainly should be measures enforced to regulate the sale of narcotics in the South, and negroes especially should be prevented from buying drugs of this kind. Their animal instincts are too strong and their brains too undeveloped to allow them the exercise of their own will in a question which concerns their physicial and moral welfare and to a lesser extent the public weal.—*Medical Record.*

Census of Physicians in Germany.—The annual "Medical Calendar" of Dr. Schwalbe, just published, states that there are 29,997 medical practitioners in Germany, an increase of 864 during the year. Berlin has 2,572 physicians, or one to 734 inhabitants; Charlottenburg, one to 373; Dresden, one to 952, and Elberfield only one to 1,843. Twelve women obtained from the government, in 1903, the right to practice medicine. The number of dentists has increased much more rapidly proportionately than that of physicians. In 1876 there were but 498 dentists in Germany, with a population of 35,000,000, but in 1903 there were 1,922 dentists in a population of 58,000,000.—*Medical Record.*

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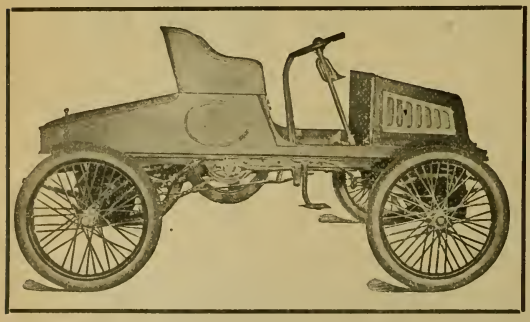
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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Surgery and Gynecology in Chicago.

By H. A. Royster, A. B., M. D., Raleigh, North Carolina.

Much may be learned by intelligent practice at the expense of the patients; much may be learned by careful study and practice on the dead body, but most of all will the young surgeon derive information from a close and intelligent personal attendance at the operations of our great masters.—*Greig Smith.*

For two or three years I had been planning to get out of the Eastern rut and see some surgery in the West; but not until the summer just passing did the opportunity come. During a period of four weeks in July and August it was my good fortune to attend surgical and gynecological clinics in Chicago, the great western metropolis, and the second largest city of our country. In this paper I shall attempt to give a simple account of the work that I witnessed, with some reference to the methods and personalities of the operators themselves.

It is unquestionably true that one can see as much surgery in Chicago as in any other place on earth. Within five years it has fallen to my lot to follow personally the work of eminent operators in several of the large cities, both in this country and abroad; and, though my visit to the West occurred in the dull season, I am abundantly satisfied with the truth of the foregoing statement. And all the work was of a varied and interesting character. Most of those doing general surgery were operating upon every kind of case—including the eye and ear, othopedics and gynecology. Their argument is that the principles to be applied are the same, no matter what region of the body be affected. There are very few genuine gynecologists in the city. The general surgeons have invaded and all but captured this limited field—a condition of affairs more

prevalent all through the West than in the East. In Chicago three or four eminent gynecologists still flourish and are men of mark in that honorable body of specialists who confine their attentions to the pelvic organs of the female. But the great bulk of this work taken as a whole, is being done by the general surgeons (or just "surgeons") larger in number and no less eminent. A discussion of this surgical poaching and its possible results would be interesting but out of place.

The hospitals of the Windy City are rather disappointing to one who could not help comparing them to those in the East. As a rule they are smaller, less modern and have more meagre equipment than the hospitals of corresponding grade in New York, Philadelphia or Boston. In short, it can be seen at a glance that less money is spent on them. Chicago is comparatively a new place and its growth has been phenomenally rapid. It is a simple statement of facts to say that the hospitals have not kept up with the pace set by the municipal and business interests. In further explanation I will hazard the remark that the basal element in Chicago's prosperity has been the German thrift, (300,000 Deutschers are there), which will not allow its possessors to lavishly part with their earnings or to give away anything merely for show. The want of magnificence does not detract from the quality or quantity of the work, for, judged by this standard, Chicago is not a whit behind the seaboard cities.

Of those, whose clinics I had the pleasure of visiting, there were six, who stood out prominently and of them I shall endeavor to give a fair account. The men were: Murphy, Ochsner, Bevan, Henrotin, Byford and Findley; the first three being so-called general surgeons, and the last three gynecologists. In the comprehensive title of my paper I do not by any means intend to imply that I saw all the surgery and gynecology in Chicago nor that I witnessed every bit of work done by the operators named. There are, of course, many other excellent surgeons in that city besides those whose work I had a chance to observe.

Murphy.—Without a doubt John B. Murphy can be counted the premier surgeon of the West. Most of his colleagues concede that position to him. His title to such eminence may be said to rest not upon one, but upon several attributes. Naturally he is best known to fame, both lay and medical, on account of the "Murphy button"; but in addition to mechanical genius, he possesses strongly all the surgical qualifications. He is a splendid teacher, being able to impart his knowledge easily and clearly so, that even if one should not see an operation, one could readily understand every step from his lucid description. While operating he talks almost continually. His knowledge of pathology is profound and of that practical kind, which enables him to put it to instant use. Some years ago his summary of the pathological changes in appendicitis shed new light for me on that affection at a time when its real nature was little understood. As an operator Dr. Murphy leaves nothing to be desired. He is rapid enough, without being hurried, and is always neat. A certain forceful gentleness in handling tissues is a strong characteristic. His fingers are long and seem never to be in his way. Occasionally he exhibits some impatience, but his oft-repeated, "Thank you," throughout the operation is quietly reassuring. Murphy's experimental surgery, his research work, and

new suggestions are too well known to receive detailed commment here. I cannot say that I was quite satisfied with what I saw of the gutta-percha-benzene solution for the hands, though I have no direct criticism to offer.

Altogether I saw Dr. Murphy perform fourteen operations. They were all done at Mercy Hospital, and were as follows: 1. *Round-ligament suspension of the uterus.*—A simple folding over and stitching the ligaments with catgut to the posterior surface of each uterine cornu. The patient was put to bed with her head elevated nearly to an angle of 45°. No pessary. 2 *Choledochotomy.*—A difficult case, the stones being in the common duct behind the duodenum. The duct was incised, the soft mass of stones scooped out above and below, and a rubber drainage tube inserted. This was turned upward into the hepatic duct, but had an opening toward the common duct, so that it would drain in both directions. The tube was fastened in with catgut. The gall bladder, not enlarged, but with greatly thickened walls and containing one small stone, was stitched with catgut to the peritoneum on one side of the abdominal incision and drained also with a rubber tube which was secured by a purse string suture of catgut. Iodoform gauze strips were carried down to the foramen of Winslow, coming out between the tubes, and the wound closed except a small opening for the drainage. Some enlarged glands in the gall-bladder region suggested malignancy, but this was not thought to be likely. A very instructive operation. 3. *Nephrectomy.* Male patient, 50 years of age, who had a large tumor in the loin, with hematuria and a dull pain. After making the incision across the loin, with hematuria and a dull pain. remove the kidney if the tumor was a sarcoma, since all such cases died of recurrence in the other kidney within six months; but, if it was carcinoma, he would remove the organ. On cutting down, the appearance indicated carcinoma and the kidney was, therefore, removed. Instead of tying the vessels, a right-angle clamp was applied to be left on for 48 hours, and the large space was drained with tube and gauze through a small opening. The specimen was a beautiful one; after being cut open, it showed invasion of the pelvis by the growth and appeared to be more like sarcoma. 4. *Exploratory incision* for inoperable carcinoma of the stomach. A gastro-enterostomy would have been done if the Resident had not neglected to wash out the stomach. 5. *Pelvic abscess.*—An old pus-tube, with a secondary rupture into the cellular tissue, supplemented by a positive gonorrheal history. Only right tube and ovary removed, the left side being healthy. The operation was a perfectly dry one; no flushing, but a rubber drainage tube was inserted. 6. *Perineal prostatectomy.* Steps: sound in bladder; an inverted V-incision, going through deeply on each side of the median line down to the prostate, then separating the tissues of the raphe upwards, in order to avoid wounding the rectum; the capsule of the gland was cut transversely and the prostate peeled out. Not very much bleeding. A large stone was removed from the bladder. The floor of the uretha was necessarily torn. It was repaired by continuous catgut suture, beginning below and going upward, leaving room for the large tube, which was included in a stitch to hold it, and brought out through the external wound. The incision was closed by catgut on the deep muscles and silk-

worm on the skin. A pretty operation, every detail of which could be observed. It was astonishing how freely the prostate was exposed and how much a spectator could actually see. 7. *Excision of inguinal glands,* probably chancroidal, enlarged and suppurative. Dissected out, with free, bold incisions; cavity filled with dry iodoform and skin closed, except for a small wick of gauze drainage. 8. *Excision of lip and glands for epithelioma.*—An ordinary operation for such cases. 9. *Abdominal infection* with perforation of the bladder.—An obscure case. The patient was a doctor, from Ohio, with a tubercular family history, who two years before was treated for rectal disease, having, it is said, some ulcers cauterized. A year ago he began to have pain on defecation; after that frequent and painful micturition, accompanied by a sensation as of air in the bladder ("bubbling"). Chills and fever have appeared at different, irregular intervals . Loss of weight has been gradual, but marked. Murphy diagnosed an infection, probably through the floor of a rectal ulcer with subsequent perforation of the bladder. *Abdominal section* showed adhesions between sigmoid, omentum and bladder; these being separated gently, a small amount of gramous pus came out. Drainage was accomplished by tube and gauze, and the wound closed around these. To do more than simply open and drain would have been veritable meddlesome surgery. Two days afterward the patient had a normal temperature. 10. *Kidney fixation and appendectomy, a.* Incision curved toward groin, kidney delivered, capsule stripped off, leaving it loose at each side; three sutures of catgut are used to suspend the kidney. They are introduced first through the capsule (over-stitched once), then through edge of kidney cortex and finally through other portion of the capsule, with the same over-stitch. These sutures, having a needle at each end, are then passed upward through the deep muscles and after being tied, are cut short, thus bringing the denuded kidney surface well up under the incision, which is closed with figure-of-eight silk-worm. *b.* The patient was then placed on her back and the usual incision made over the appendix. It was found adherent to the cecum and pretty long. He dissected it out by stripping off its peritoneal covering, up to where the meso-appendix was tied, by this device preventing hemorrhage and the leaving of a raw surface. The appendix was crushed with forceps and tied off at that point with catgut; the distal end was cut away, leaving a stump, which was touched with carbolic acid and not inverted, but covered with cecal tissue, sewing this over with linen thread. 11. *Amputation of cervix uteri* (Shroeder) for tuberculous (?) ulcer in a patient who had had an Alexander operation, but who continued to have leucorrhea and menstrual difficulty after going 3 months following the operation without symptoms. Kangaroo tendon sutures. No vaginal packing. Also crushed and tied some external hemorrhoids in the same patient. 12. *Drainage and irrigation through the appendix.* A young man, despite all medical treatment, continued to have profuse discharge of pus by the rectum. Nothing could be discovered by an examination through the anus. A median abdominal incision was made and nothing of interest found in the intestines—no growth, ulcer or mass. Therefore, he pulled the appendix through a small stab-wound in the right iliac region and fastened it in place without opening it. Median

incision closed. After six days, the appendix will be opened and the colon irrigated through it. (Treatment first suggested by Weir, of New York.) 13. *Large suppurating ovarian cyst.* —The patient was septic, with edema of the lungs, high fever, rapid pulse and thrombi in lower pelvic and femoral veins. Ether in very small quantity was given on the operating table; a small incision was made. The cyst, adherent anteriorily, first discharged serous fluid, then pus, from a daughter cyst lower down. A drainage tube was stitched to the cyst wall and this in turn to the abdominal wall, including the skin. Murphy said: "If I had attempted to radically remove the cyst, it would have killed the woman; that isn't surgery." 14. *Lumbar puncture* of the cord and introduction of cocaine solution for *tetanus.* (Already reported by Dr. Murphy in the *Journal A. M. A.*

(*To be Concluded in December Issue.*)

Intestinal Perforation in Typhoid Fever.

By Hugh M. Taylor, M. D., Richmond, Va.

Within the past two months I have been called on to operate upon two cases of typhoid perforation and to see one case of intestinal hemorrhage which was at first thought to be a case of perforation. I rarely discuss this subject with medical colleagues who can not recall deaths in their practice from suspected perforations which were not operated upon, and even in the newspapers we not infrequently see notices of deaths from peritonitis complicating typhoid fever. An occasional epidemic of Cholera, Yellow Fever, or Bubonic Plague that killed 50,000 people in the United States every year would create widespread terror in the medical and civil governmnet. Every year more than 50,000 of the young manhood, womanhood and childhood of the United States alone die from typhoid fever. The United States Marine Hospital Report, page 1008, 1896, estimates that there are 500,000 cases and 50,000 deaths. Victor Vaughan in a recent address says, "There die in this country every year from typhoid fever alone not less than 50,000 people." These reports are made up from the reports of the larger towns and cities in which mortality rates are compiled. They do not include the thousands which occur in the country and of which no report is made. Many more than 500,000 obviously occur from typhoid fever in the United States each year and, assuming a death rate of 10 per cent., many more than 50,000 deaths ensue. Preventive medicine has accomplished much in the field of typhoid fever—it has yet much to accomplish. It is claimed that 3 per cent. of typhoid fever patients die from intestinal perforation. Three per cent. of 50,000 is 1,500. More than 15,000 deaths from typhoid perforation in the United States each year. Writers have estimated that not more than 95 per cent. of typhoid perforations will die without operation; others place the death rate at 99 per cent. Possibly a perforated cæcum of appendix from typhoid ulcer may result in a circumscribed abscess; in fact, this is not infrequently the case. More than 80 per cent. of complete perforations occur in the last eighteen inches of the ileum, and I fully agree with those who think in such cases we may expect a mortality of 100 per cent. This being true, more than 15,000 cases of typhoid perforation should be operated upon in the United States each year. In 1900, Dr. Keen could only tabulate the reports of 158 cases operated upon. In April,

1903, Frank reports but 352 cases operated upon in the world. Of course there are unreported cases operated upon, but they are comparatively few in number. Contrast this statement with the plea that more than 1,500 cases should be operated upon every year in the United States alone and you have my excuse for persistently bringing this subject before you for discussion. As a matter of fact, it embarrasses me to bring my statistics before you—they compare unfavorably with the achievements of other surgeons in the field, and some of which I shall present to you to sustain the claims for operative intervention in all cases of typhoid perforation. I am optimistic to an extreme as to the value of surgical aid in typhoid perforation, not from my own experience, but from a study of the opinions and the results secured by others. My cases include seven operations for complete perforation of all the lower portion of the ileum, and but one recovery. It is not a difficult matter to explain my high death rate. My medical friends have not solved the problem of how to make an early diagnosis of perforation. With but two exceptions, my cases were eleventh hour cases, and several of them practically moribund when operated upon. I feel it my duty, as I think it is the duty of every surgeon, to give even these forlorn cases the only chance left them. Greig Smith, in connection with this question, pertinently asks, "Who can always tell when a patient is moribund?" In all but two of my cases I was not called upon to operate until after the first twenty-four hours, and in all widespread, so- called general peritonitis was conspicuously present.

What has surgery accomplished in the treatment of typhoid perforation? "Twenty years ago," says Dr. Osler, "we would fold our hands and murmur that all was over" when we were brought face to face with a case of typhoid perforation. Recently Dr. R. C. LeComte reports three consecutive successful cases. Dr. W. H. Hoggard, Jr., reports three cases and three recoveries—100 per cent. What a stimulus! and more than 15,000 cases in the United States to operate on each year. Certainly the profession at large did not appreciate the importance of this subject until the advent of Dr. Keen's well-known paper in 1901, in which he showed in 158 cases a mortality of 23.4 per cent., and this in spite of the fact that it included late operations in many instances and by inexperienced operators in not a few. Since 1900 our confidence in operative intervention has, with cause, steadily grown. Notably due to statistics from Drs. Warren and Cobb, 25 per cent.; Dr. Osler, 37.5 per cent.; Dr. Cushing, 41.6 per cent.; Dr. Armstrong, 37.5 per cent. One operator—Eschner—has the proud distinction of saving 50 per cent.—fourteen cases and seven recoveries. More than one series of 40 per cent. of recoveries have been reported and it is confidently predicted that an early diagnosis and operation to prevent septic peritonitis will result in the saving of from 50 per cent. Fifty per cent. of more than 15,000 is an indication of the possibilities of surgery in this field in the United States alone.

By far the most important phase of this subject is the early diagnosis as it implies preventive surgery. How to make an early diagnosis and how to treat the late sequences of typhoid perforation may well be the limit of this paper. The former, the early diagnosis, is the more important of the two, for a greater number of early diagnoses means fewer late cases, with gross

intra-peritoneal lesions, to operate upon. The diagnosis of the late cases is easily made. We have the usual symptoms of general suppurative peritonitis. The answer to the first question must be solved to a large extent by the general practitioner. As a rule, only the family physician has the opportunity to study the initial symptoms of perforation. Certainly, my experience sustains the assertion that the surgeon is very frequently not called in to see the case until gross consequences of perforation are pronounced. I can not too emphatically agree with those who have urged the co-operative study in all suspicious cases by the general practitioner and surgeon. More cases are undoubtedly being recognized. A vast number are not recognized. If we keep in mind that 3 per cent. of all the cases of typhoid fever we are called upon to treat will have perforation, we will watch more intently for the first symptoms. Some sage has remarked that the matter of diagnosis is largely guess-work, but adds that the practitioner who is looking for a trouble and has its symptomatology uppermost in his mind will more frequently make the early and correct diagnosis.

In typhoid porforation, as in many intra-peritoneal morbid conditions, we may expect to meet with typical and atypical cases. In some, the clinical picture will be unmistakable. In others it will be blurred beyond recognition. If when called to a case we are told that it had run an uneventful course, that there had been no pronounced abdominal symptoms, no mental confusion or delirium to make an expression of symptoms, that the patient was—up to a given time—comfortable, and, while voiding or having an action, was taken with sharp, continued pain and tenderness and muscular rigidity, perhaps with chill, reduced temperature, increased pulse-rate and vomiting, symptoms of shock, we have a chain of evidence pointing to perforation as closely linked as we commonly have to rely upon in most acute peritoneal infections. A large majority of the cases I have seen have presented a clinical history as clear as is indicated by the above grouping of symptoms.

On the other hand, it is easy to see how such symptoms may be masked if the patient is delirious, if there is abdominal distention and gastro-enteric disorder and if there has been daily marked variations in pulse and temperature. Fortunately, in my experience, a large number of typhoid cases are atypical in type and the gross symptoms which would mask the symptoms of perforation are probably in the minority. It should be borne in mind that other conditions than perforation may, during the existence of typhoid fever give rise to symptoms of local and general peritonitis. Incomplete perforation may, and I think often does, give rise to local peritonitis and adhesions. In one of my cases a pre-perforative abscess formed with later rupture and flooding the peritoneal cavity with pus and intestinal debris. The lower portion of the ileum entered into the formation of the abscess wall and in this portion of the ileum was a large perforation. I do not believe that adhesions occur after porforation of the small bowel, but I do think it not infrequent in the perforative stage and it possibly saves many lives. It is also essential to take into consideration the occurrence of acute cholecystitis, appendicitis, infection, suppuration and discharge of mesenteric and other intraperitoneal glands and also thrombosis of intraperitoneal blood vessels. While these are probabilities

and relatively infrequent perforative cholecystitis, and thrombosed mesenteric vessels may give rise to acute symptoms of local and general peritonitis.

I have seen a number of cases of acute cholecystitis occurring during the course of typhoid fever. In several instances I have mistaken typhoid fever in its incipiency for appendicitis and I have seen the two conditions co-exist. I have not, however, seen perforative peritonitis during typhoid fever due to any cause except typhoid perforation. Usually the differentiation has only to be made between typhoid fever and the conditions mentioned. In exceptional instances an unrecognized ambulatory case of typhoid fever may have perforation and the only symptoms presented will be those of perforative peritonitis.

The symptoms of intestinal hemorrhage may at first simulate to some extent those of perforation, and this is notably so when the two conditions coexist. A case recently seen with Drs. E. J. Moseley, Jr., and Wm. S. Gordon presented slight symptoms of abdominal pain, profound collapse, reduced temperature, increased pulse, anxious expression, pinched features, and this was followed in six or eight hours by reaction. I was at first equally misled, but there was in this case an absence of the acute lasting pain, tenderness and muscular rigidity, and later on progressive improvement and large, bloody stools cleared the obscurity in the diagnosis. No feature in the diagnosis is more important than the sudden transition of a case from the quiescent condition to one evincing acute intraperitoneal invasion, and no symptoms of the last conditions are more uniform than acute, lasting pain and tenderness with muscular rigidity. With these we may or may not have the usual symptoms of shock. The limits of this paper will not permit me to analyze in detail the relative value of pain, tenderness, rigidity, vomiting, hiccough, reduced temperature, increased pulse rate, distention, liver and flank resonance, inhibited peristalsis, the value of blood count, blood pressure, the injection of fluids and air into the suspected peritoneal cavity, etc. Usually writers have confused pre-perforative symptoms, symptoms coming on immediately after perforation, and the later symptoms—those expressive of acute widespread peritonitis. I agree with those who classify the symptoms into three groups: (1) the pre-perforative, (2) the early or immediate symptoms of perforation, (3) the late—those of septic peritonitis. These last are really not symptoms of perforation; they are its inevitable sequence—virulent, widespeard peritonitis.

In the diagnosis of perforation we must not in the incipiency expect an unbroken chain of evidence. Missing links are found in the symptomatology of acute gastric bile-tract and appendiceal infection. If there is pain and muscular rigidity in the right iliac fossa a majority of surgeons will operate, confidently expecting to find an appendicitis. Clinicians who have had the largest experience in dealing with typhoid perforations impress the danger of delay. Dr. Osler writes: "As typhoid patients bear operation well, it is better to err in favor of surgery than to let valuable time be lost in waiting for further confirmatory evidence," and again, "In doubtful cases, give the patient the benefit of the doubt and operate." Dr. Cushing, "When reasonably in doubt, explore." Richardson, "Operation should be done when perforation is suspected rather than demonstrated." Greig Smith, "At the worst, happen

what may, the patient can be in no more deplorable condition than before operative interference was carried out, and I would plead for an attempt to reduce a mortality of 100 per cent." Early operation lessens the amount of surgery called for, is conservative and life-saving.

The technique of the early operation is very simple and implies a median or right lateral incision (I prefer the latter, as it gives easier access), suturing the perforation and cleansing the soiled area, and I agree with those who claim that 50 to 60 per cent. of cases thus treated should recover. The best technique in eleventh hour cases is an unsolved problem. How best to treat widespread intra-peritoneal infection from any cause is an open question. In this, as in other acute intra-peritoneal infections, the key to success depends upon getting into the abdomen early and out of it just as quickly as is consistent with complete work. It is sometimes as hard to know when to get out of the abdomen at the right time as it is *when* to get in. Complete work implies that which will save the greatest number. A conception of what should be regarded as complete work varies *very* widely. Good men are not willing in general infection to stop short of evisceration and using gallons of water in flushing—others are content to wipe out the infected cavity. Still others contend that if we trust more to the recuperative powers of the peritoneum after removing the focus of infection we will get better results. Still others, notably Dr. J. B. Murphy, think prolonged irrigation and wiping and prolonged anæsthesia shock to such an extent that the patients do not rally. He recently reported 16 bad cases (one typhoid perforation) in which he simply removed the focus of infection, instituted pelvic drainage and trusted to the peritoneum to do the rest. Fifteen per cent. of these ceses recovered. Fowler saved 62 per cent. Escher thinks suturing of perforation produces immediate stenosis of bowel and, as we have stated, he contents himself with simply finding the perforation and suturing the torn segments of bowel into the abdominal incision. His report of fourteen operations and seven recoveries is the most encouraging I have seen. Greig Smith uttered a truism very pertinent in connection with Escher's method of treating typhoid perforations: "Better a live patient with a fæcal fistula than a dead patient with an air and fluid-tight anastamosis." I live in the hope that some of the pathfinders in surgery will soon blaze a way out of this horrible wilderness, which the initiated may successfully follow in the treatment of widespread peritoneal infection. In the treatment of eleventh hour cases of general peritonitis from typhoid perforation I have eviscerated and irrigated and I have irrigating without eviscerating. I have used multiple gauze and tubular wick drainage, anterior, posterior and lateral, after wiping. I have followed as best I could Fowler's technique. In one recent case, operated upon after thirty-six hours after perforation, under local anæsthesia, upon a practically moribund patient, I followed Escher's technique, and in my last case, operated upon twenty-four hours after perforation, I only sutured the porforation, put a large tube into the recto-vesical pouch and the patient in Fowler's position. With few exceptions, my patients have all died. I can see nothing but the deepest gloom when I view widespread intra-peritoneal infection from typhoid perforation, and this in contrast with the brilliant results from the early op-

cration. I shall continue to deny no one, however seemingly moribund, the only hope offered. I plead for an early diagnosis and operation whenever and wherever a case of typhoid perforation occurs. Escher saved 50 per cent. Is his technique without the scope of the general practitioner? Two of my recent graduates have operated successfully in the backwoods of West Virginia. I advocated the closest co-operative work in this, as in many conditions, between surgeon and physician. If, however, the victim of typhoid perforation can not be gotten to the surgeon or the surgeon to the victim, I claim that the general practitioner has no more right to shirk the responsibility of operating, and thereby abandon his patient to inevitable death, than he has in a case of strangulated hernia. There is a possibility of a saved life by a fæcal fistula in the case of strangulated hernia— as far as we know, it is death or operation in typhoid perforation. Dr. Victor Vaughan, in a recent address, says typhoid "is essentially a disease of the rural districts." Thousands of cases can only secure the services of the country practitioner. Don't stop to think of asepsis. It can always be secured, but even if it could not the general practitioner's hands can not possibly be as foul as the peritoneal cavity with fæcal matter pouring into it. Their condition can not be made worse. Look for them and they will be found. Operate by Escher's technique and some will be saved. A case abandoned at any stage is a reproach.

It is stated that the government of the Mikado intends to introduce on a large scale into Japan the system of protection against malaria which has been so successful in Italy and elsewhere.

Post-Operative Femoral Thrombo-Phlebitis.

By Lewis C. Bosher, M. D., Richmond, Va., Surgeon to Memorial Hospital.

Any pathological condition that by its unexpected advent after a surgical operation may interfere with the otherwise "uneventful recovery" which, up to a certain time, has confirmed the favorable prognosis given by the operator must be of interest to the surgical profession.

Femoral thrombo-phlebitis is a complication which may appear without warning after abdominal operations, at times coming on when the patient is about ready for discharge, or even after discharge, and since there are some disputed points in connection with the affection, the following cases are presented, together with a brief discussion of the most salient points in connection with the lesion which they illustrate.

The seven cases here reported, all of which were within the past three years, occurred in the services of the writer and his colleague, Dr. George Ben Johnston, at the Old Dominion hospitals. Since they were the only instances of this complication during seven years, in the course of a large number of abdominal operations, undertaken for a variety of pathological conditions, it is seen that, while the affection is frequent enough to demand that the possibility of its occurrence be borne in mind in all abdominal operations, still it is by no means common.

The usual history of post-operative thrombo-phlebitis, as seen in the cases here reported, as well as in those elsewhere published, is that it is liable to follow operations involving abdominal section, regardless of the lesion for

*Read before the Medical Society of Virginia at its meeting at Richmond, Oct. 18-21, 1904.

which operation is undertaken. If infection plays any part in the development of the lesion, this is seldom shown by other symptoms, for in most cases the wound heals aseptically and the progress of the case prior to the appearance of phlebitis is otherwise satisfactory.

At some time after the first week, and most commonly about the end of the second week, the patient complains of pain along the course of the femoral vein and, on examination, there is found tenderness, inflammation of the vein and edema of the limb. The temperature and pulse rarely depart markedly from normal, and, indeed, there is little beside the local symptoms. Under appropriate treatment the symptoms slowly subside, and recovery is the rule, without any untoward sequelæ.

The left side is most commonly involved. Of the seven cases here reported, six were on the left side. In Clarks' cases, the left limb was affected in twenty-five, the right in eleven and both legs in five. In four cases the operation was confined to the right side with the occurrence of the thrombus in the left leg. In two cases reported by Willy Meyer, the left leg was first involved and the right became affected later on, when the symptoms on the side first involved had nearly or completely disappeared. Vanderveer's four cases were all on the left side.

The complication does not appear until at least a week after the operation. Of thirty-six cases chronologically tabulated by Clark, the earliest was eight days and the latest thirty days after operation, with eighteen of the cases (fifty-four per cent.) appearing from the thirteenth to the seventeenth day, inclusive. Vanderveer's cases occurred between the sixth and the sixteenth day. Of the seven cases reported by the present writer, the earliest was seven days and the latest thirty-two days after operation.

The chief points of interest in connection with post-operative thrombophlebitis relate to its origin, since the diagnosis is always evident, the prognosis favorable and the treatment simple.

The etiology of the affection is a question concerning which there is at present a decided difference of opinion, and the subject is by no means settled. On order to understand the reason for the conflicting views held by different writers, it is necessary to consider briefly the changes which scientific opinion has undergone in reference to the relation to each other, as cause and effect, of thrombosis and phlebitis in general.

Hunter and Cruveilhier taught that inflammation of the vein was the primary lesion and that this gave rise to the thrombosis. This theory was generally accepted until the middle of the last century, when Virchow, as the result of extended study, reversed these teachings and gave to thrombosis the causative role. As a result of his views the text-books for many years thereafter laid great stress on thrombosis and had little to say of phlebitis. This was the prevalent opinion until the natural change brought about by the advent of bacteriological science, and during recent years we find the predominance of authority regarding the inflammation of the vein (itself of infectious origin) as the primary lesion and the thrombosis as a sequel.

The above brief historical sketch applies to the subject of thrombosis and phlebitis in general. Regarding the etiology of the special form of thrombophlebitis dealt with in the present paper, there have been no such changes of opinion. This is natural when we

recall the fact that operations involving abdominal sections are the ones followed by this complication and the further fact that abdominal sections were not performed to any great extent before the days of Listerism, itself a child of bacteriology. Hence post-operative femoral thrombo-phlebitis first attracted attention when the theory of the infective origin of thrombo-phlebitis in general was in the ascendency. Thus we find, at least until recent years, that writers almost without exception held to the infectious origin of the trouble and laid stress on phlebitis as the cause of the thrombus. It is necessary to recall these facts in order to understand why it is that the infective theory has only of late been called into question.

Regarding the etiology of post-operative thrombo-phlebitis, we have therefore at the present time two conflicting theories. According to the first, the lesion starts as a phlebitis, due to infection at the time of the operation, while the second theory regards thrombosis, due to traumatism, as the primary lesion, which, in turn, is responsible for the inflammation of the vein.

According to Clark, who is an ardent supporter of the latter theory, injury to the epigastric veins by retractors is the cause of the trouble. He maintains his position by an excellent line of argument, supported by critical analysis of forty-one cases, claiming that infection cannot be the determining factor, because in his long series of cases septic operations were not as frequently followed by phlebitis as were aseptic cases. In support of his position that the epigastric veins are the starting point, he calls attention to the fact that "out of hundreds of plastic operations, ranging in extent from a simple trachorraphy to the most extensive resection of the vagina, rectum and cervix, not one case of femoral thrombo-phlebitis has been noted." The above are the chief clinical reasons for his position, but on the theoretical side he lays stress on the anatomical relations of the epigastric veins, which enter the femoral vein at an obtuse angle to the blood current, thus giving rise to an eddying motion of the blood, which Recklinghausen advances as a most favorable condition for the formation of a thrombus. Welch regards Recklinghausen's theory as a "valuable contribution" to our knowledge of thrombosis, and both he and Clark explain the occurrence of femoral thrombosis on the left side more frequently than on the right as being due to the more difficult return flow from the former, in consequence of the greater length of the left common iliac vein, its passage beneath the right common iliac artery, and probably to pressure upon this vein by a distended sigmoid flexure or rectum.

As these cases almost invariably terminate in recovery (except in the presence of further complications, in which case no fair deduction could be made), there is no opportunity for post-mortem examination to decide this question definitely. As Welch truly observes, "what is needed is an anatomical and bacteriological examination of the thrombi in these cases; but as the termination is usually favorable, the opportunities for such examinations are necessarily rare." The same writer further directs attention to the fact that even the finding of bacteria in the thromus, *post mortem*, would not necessarily prove its infectious origin, since this might well be due to an invasion of the tissues during the time immediately preceding death, as pointed out by Flexner in his article on terminal infections.

The occurrence of femoral thrombo-

sis in typhoid fever, influenza and other infectious diseases, as well as in post-partum infection, simply proves that the lesion is at times of undoubted infectious origin, while the fact that under these conditions, too, the left leg is the more commonly affected, is due to the same anatomical peculiarities as have been pointed out. The similarity of the lesions, in other words, argues for similar causes of extension into the left femoral vein rather than for necessarily similar original cause.

While the present series of cases is too small to enable the writer to attempt to decide absolutely between the above theories, it has seemed to him, in spite of the preponderance of authority in favor of the septic theory, that the symptoms presented by these cases were not such as are observed in phlebitis of infectious origin. The absence of other symptoms of infection, either local or general, the slow onset of the trouble, the fact that pulmonary embolism does not occur, as would be likely to happen occasionally from breaking down of a septic thrombus, and the almost invariably favorable termination of the trouble, all seem to favor the traumatic theory as the correct one in the vast majority of cases of post-operative femoral thrombophlebitis.

Regarding treatment there is little to say. These cases almost invariably terminate in recovery. As to prophylaxis, if the infective theory held by most suregons be correct, asepsis in operating would thus assume, if possible, additional importance. If we accept Clark's theory of injury to the epigastric veins by means of retractors, care in the use of these instruments may accomplish much. The interposing of sterile gauze between the retractors and the soft tissues, a practice now common with some surgeons, would thus seem to be rational and advisable procedure, for this as well as for other reasons. Needless manipulation and unnecessary bruising of the tissues should also be avoided. Elevation of the foot of the bed, especially in anaemic subjects, after operation, as has been advised by Lennander, can do no harm and may be of prophylactive value by favoring the return circulation.

As to curative measures, these are largely negative. Palpation is to be performed only when absolutely called for, and then with the greatest care, on account of the possibility of dislodging a portion of the thrombus and thereby causing pulmonary embolism. Complete rest in bed, elevation of the limb, enveloping the affected leg in cotton, held in place by a lightly applied bandage, and the application of glycerine and belladonna, or belladonna and mercury ointment, will usually result in complete recovery. The patient should not be allowed to leave bed or to undertake any muscular effort for some time after complete subsidence of all local symptoms. The wearing of an elastic stocking during convalescence will give support to the limb and add to the comfort of the patient.

The seven cases referred to in the above paper are here appended, the first three occurred in the writer's service, the last four in the service of Dr. George Ben Johnston:

Case I. Mrs. F. G. White, age 25. Admitted to Memorial Hospital October 21st, 1903. Diagnosis, Right Ovarian Cyst. October 24th under chloroform and ether anesthesia, through a median abdominal incision, the tumor was removed. An appendectomy was performed at the same sitting. Abdominal wound closed by through and

through sutures of silk worm gut. Bowels moved freely on the second day after operation, and on the tenth day the stitches were removed. Abdominal wound healed by primary union. Fourteen days after the removal of the cyst, patient complained of feeling badly and temperature began to rise (100° F.) Pain was experienced in left thigh and leg, and a swelling over seat of left iliac vein was discovered. Typical phletitis, with decided tenderness over the course of the femoral vein, and swelling of the left thigh and leg developed. Temperature varied from 99° to a little over 101° F. during the attack of phlebitis, which lasted four weeks. Rest, elevation of the limb and its envelopment in cotton , with application of ointments, constituted the treatment.

Case II. J. B. V., white, male, aged 22 years. Admitted to Memorial Hospital on the evening of April 9th, 1904, with a diagnosis of acute appendicitis. Temperature on admission 103° F., pulse 120. Patient, under gas and other anesthesia, was operated on within an hour after entering the hospital. Appendix was found to be gangrenous and perforated, some pus having escaped into the surrounding tissues. Removal of appendix, insertion of gauze drain, and partial closing of the wound with through and through sutures of silk worm gut completed the operation. Drain removed in a week and sutures at the end of ten days. Patient was discharged from the hospital in twenty-five days after his admission. In about three days after reaching home, he began to complain of pain and swelling in his left thigh and leg. His attack of phlebitis did not prove a severe one, but responded very promptly to rest, elevation of the limb, and bandaging, in about three weeks.

Case III. Mrs. McG., white, age 35 years. Married eight years; has three children; no miscarriages; labors all normal. Admitted to Memorial Hospital November 2nd, 1903. Diagnosis, Cyst of the Right Ovary and Laceration of Cervix and Perineum. November 3rd, under chloroform and ether anesthesia, cyst was removed and the cervix and perineum repaired. Primary, aseptic healing of the abdominal wound and satisfactory healing of the repaired lacerations. Four weeks after admission to the hospital, patient was discharged in good condition. Four days after reaching her home, patient had a chill and later a rise of temperature, pain being complained of over right femoral and iliac veins. Still later a tumefaction could be made out just above Poupart's ligament. Temperature reached 102° F. Pain extended down the right thigh and leg, along the vessel, and marked swelling of the limb was noticed. The symptoms were well marked, necessitating the patient's confinement to bed for nearly three weeks. Under rest, elevation of the limb, and ointments, the symptoms subsided and good use of the leg resulted.

Case IV. Miss S. F., white. Operated upon at the Old Dominion Hospital May 22nd, 1903, for Catarrhal Appendicitis. Chloroform anesthesia. Primary, aseptic healing of the abdominal wound. Seven days following operation, first symptoms of thrombo-phlebitis observed. Left iliac vein, and later femoral, became involved, followed by marked tenderness along the course of the vessel and pronounced swelling of the limb. Symptoms slowly subsided under rest, elevation and application of cotton to the limb. Attack lasted nearly six weeks, with moderate run of temperature, the patient's limb being still slightly swollen, necessitat-

ing the use of an elastic stocking, when she was discharged from the hospital.

Case V. Mrs. M. D. S., white, age 44 years. Diagnosis, Chronic Appendicitis. Operated upon July 5th, 1904, at Memorial Hospital, under gas and other anesthesia. As pus was present, a stab-wound was made in the right flank to secure drainage. Anterior wound healed by primary union. A small quantity of pus escaped through the stab-wound for about a week, after which the wound closed by granulation. July 16th, twelve days after the operation, patient complained of pain in the left groin and thigh, and examination revealed a small tumefaction just below Poupart's ligament, on the inner side of the left thigh. A line of inflamation extended from the tumefaction, along the course of the vessel, to just above the ankle, tender to pressure and cord-like to touch. The usual swelling of limb was also noted. The attack lasted a little over two weeks, the temperature during the sickness varying from 99° to 102° F. Good use of limb resulted.

Case VI. Miss B. L., white, age 23 years. Admitted to Memorial Hospital July 5th, 1904. Diagnosis, Chronic Appendicitis. July 7th operation was performed under chloroform anesthesia. Aseptic healing of abdominal wound. Eleven days later, patient complained of pain and swelling in left thigh. Typical symptoms of thrombo-phlebitis followed, the temperature ranging from 100° to 101° during the attack. Patient discharged from hospital August 12th, with temperature normal, but still complaining of pain and swelling on walking.

Case VII. Dr. B., white, age 28 years. Admitted to Memorial Hospital June 8th, 1904, with a diagnosis of Chronic Appendicitis. Operation performed under ether anesthesia. Aseptic healing of abdominal wound. patient was discharged from the hospital July 7th, one month after the operation. Several days later, after he had returned to his home, symptoms of thrombo-phlebitis developed in the left limb, the attack pursuing a course not unlike that observed in the foregoing cases.

A Few Histories from my Case Book.

By W. H. Wakefield, M. D., Charlotte, North Carolina.

Ranney of New York states as a firm conviction, after a quarter of a century's practice as a neurologist and oculist, that "There is no field in curative medicine that is more productive of immediate benefits than the detection and scientific correction of eye-strain. Indisputable proof is offered daily to the medical profession that many physical conditions, which have heretofore baffled medical skill, owe their existence solely to a leakage of nerve force from eye-strain." Perhaps the most frequently observed symptom of eye-strain is some form of headache—varying from a slight brow ache after prolonged use of the eyes to typical sick headache which incapacitates the sufferer for days at a time Ranney, who was a great sufferer for years from sick headache and was relieved entirely by proper glasses, makes the following statement: "I believe . . . that at least ninety per cent. of all cases of typical sick headache, if unassociated with organic disease, owe their attacks to some eye defect." This statement is made after years of practice in which he had a very large experience with this class of cases. The writer has not had so large or varied an experience as this celebrated New Yorker, but his experience would lead him to say that eye-

strain produces more chronic headache than any other half dozen causes. The leakage of nerve force incident upon the performance of the visual act when the eyes or their muscles are abnormal can and not infrequently does produce many obscure functional nervous disorders. One young girl of eleven years who consulted me in regard to headache from which she suffered nearly every afternoon during the term of school, while during vacation and on Saturday and Sunday during school term she was free of headache. It was also brought out during the examination of the patient that for some months she had suffered from backache in the lumbar region. The young miss was well nourished and had the appearance of a perfectly healthy child. Under atropin, a low degree of astigmatism was disclosed, the correction of which relived the headaches and much to the surprise of doctor, patient and friends the backache was also relieved.

A somewhat similar and, to me very interesting case was seen by me about eighteen years ago. A young lady of seventeen was sent to me by her physician—a very close observer—for eye examination. This patient did not present a single eye or head symptom. Her only complaint was severe pain, at times, in the back of the neck, at the junction of the cervical and dorsal vertebræ. The pain was neuralgic in character; was often so severe as to require the services of the family doctor; had been annoying her for two years and was growing worse. Aside from this, the patient declared herself perfectly well, and she looked it. Under atropin I found a high degree of hyperopic astigmatism. Glasses were ordered and worn, to the entire relief of the patient.

A married woman, age twenty-eight, was brought to my office ten years ago. She complained a little of headache, but was a great sufferer from nervous indigestion . She was constipated, her food caused stomach pain, her appetite was poor, she was so nervous that visits from her near neighbors whom she esteemed very highly put her to bed. Atropin disclosed a high degree of astigmatism and the correcting lenses stopped the leak of her nerve force and she was a well woman in a month. Two old ladies saw be. on the same day in Winston. Both came with the history of sick headaches to such a degree that life was intolerable. No atropin was used in these cases (ages 58 and 64). Each was found to have a high degree of hyperopic astigmatism. Correcting glasses, bifocal in each case, were prescribed. I have heard from each of these grateful souls and they report permanent relief from their sick headaches. In none of the cases reported was it found necessary to administer any drugs after the eye tests were completed except in the case of nervous indigestion, who was given Elix. Lactopeptin with Phos. Ferri, Quinine and Strychnine, 6 oz. bottle.

I now wish to report two cases in whom glasses relieving the eye-strain did not relieve *all* of the distress. They differ from all the other cases in being overworked and anemic.

Four years ago I was consulted by a poor, overworked girl of sixteen. She was thin anemic, run down in every way and a martyr to headache and severe pains in and around the eyes. She was the eldest child in a family of six or seven children, three of whom were small. She had recently nursed her sick mother for several long months until her death, and in addition was housekeeper and had the care of the younger children. She was now an in-

valid herself,but having no one to relieve her, she hung on. Atropine disclosed a moderate degree of compound hyperopic astagmatism. Correcting lenses were provided her, which brought great relief to her eyes but the headaches persisted. She was given Fowler's sol. and tr. nux vom., with some benefit.

The second case of this class was anemic, but insisted in working in the mill when she could drag herself to it, although her family was anxious that she should rest. Her physician having suspected eye-strain turned her over to me for treatment. Under atropine a high degree of hyperopic astigmatism was disclosed and glasses fitted. These glasses gave her great relief. She was put on Tr. Ferri Chlo. and small doses of strychnine and in ten days resumed her work in the mill, greatly benefited. In four or five weeks she returned, saying her headaches had for a week or ten days been nearly as bad as ever. These two cases occurred in my practice at the same time and I feared I would be unable to relieve them without absolute rest and possibly a change of surroundings, which seemed impossible with either patient. In each case, I now advised the peptonate of iron and manganese (Pepto-Mangan, Gude).

The first patient required five bottles before her headaches disappeared and she was restored to health. Two years afterwards she again consulted me, her head and eye aches having returned. Sickness had again invaded her home and she had been overworked—body and mind—for months. A slight change of glasses was needed and I advised a return to the tonic with happy results. The second case was kept out of the mill a fortnight and after the third bottle declared herself well. She suffered no relapse during the two following years. I have not kept track of her since then, as the family moved away. The experience gained in these two case has been of benefit to me in the treatment of many cases since then. In anemic cases, with or without headaches, I find myself frequently advising Pepto-Mangan, Gude, and the results very rarely are disappointing.

203 North Tryon.

ABSTRACTS.

Blood Observations in Hydrophobia.

Dopps has made observations on the blood in hydrophobia (*Cent-States Med. Mag.*) and claims that the danger of rabies following the bite of a rabid animal may be determnied beforehand and the necessary treatment (inoculation) intsituted. Observations were made on two cases, the details of one being given. A differential count was made every third day. No change being noted for the first ten days. At the end of the second ten days some changes were noted and the boy was sent to a Pasteur institute. The following sums up the other fiindings:

Carnmount and Lesieur have determined that an excessive increase in the polyneuclear neutrophiles is a constant change inthe blood of patients suffering from hydrophobia, and that analogous finding are met with experimentally in rabid dogs, guinea pigs and rabbits.

These authors believe that an absence of polynucleosis is sufficient to rule out rabies in a suspected case, and hence the danger of preventive inoculation is dispensed with.

Leucocytosis is not the point in dif-

ferential diagnosis, because the number of leucocytes are not necessarily increased. The important change in the blood is the disappearance from the peripheal circulation of the mononeuclear cell and its place taken by the polyneuclear variety.

The intra-cellular changes of the leucocytes are interesting; but so far nothing has been determined which is constant and distinctive.

The protoplasm becomes heavily granular, and the capsule very much swollen. The nuclear granules take the stain very deeply and seem to be more massed than in ordinary specimens.

The "granular protective bodies" in the cell protroplasm are evident and at times take the basic stain deeply.

The red cells do not show any decided change, even a few hours before death, little disturbance is noticed.

The chemistry of the blood shows little evidence of approaching danger—the Sp. Gr. and reaction remaining almost normal.

In suspected cases of rabies the blood should be carefully examined every few days to determine, first, the normal leucocytosis; second, to note any marked change in their relations, and third, to determine the increase of polymor-neuclears, and the decrease in the mononeuclear neutrophiles. If present indications can be depended upon we can make a diagnosis of approaching rabies sufficiently long before clinical symptoms develop to warrant inoculations or the dismissal of the suspected case."

Angina Pectoris Arterio Sclerosis.

OSLER says that a large proportion of the attacks of angina pectoris is only an incident in the history of arteriosclerosis. (*Journal A. M. Asso.*) The association of sclerosis of the coronary artery with angina pectoris does not help to explain the nature of the pain or the phenomena of the paroxysm. The pain of arteriosclerosis deserves more careful study than it has as yet receive. It is intense in migrane; abdominal pain is not often due to vascular disease; it is more pronounced in the arteries of the extremities. The pain of angina pectoris is *sui geneus*, unlike in intensity to any known variety, and its association with sclerosis of the coronary artery does not explain all the elements connected with it.

In relation to arteriosclerosis, there are four groups of cases of angina pectoris. First, the neurotic, in which in young persons all the symptoms of the disease may be present and death occur, and autopsy shows normal coronary arteries and neither local nor general disease of the arteries. Such cases are not common, but I have reported an instance in a young man of 28, who had had for years paroxysms of cardiac pain of the most agonizing form, who died in an attack.

Secondly, the angina pectoris of young men associated with syphilitic arteritis, aortic or coronary, or both. This is a very distinctive form, occurring usually in men under 35 years of age. They may be no general arteriosclerosis, but the lesion is either at the root of aorta, or involves the sigmoid valves, or it may be confined to the coronary arteries. The anginal attacks, while severe, are sometimes relieved or even cured by the iodids. The paroxysms of pain may be the initial symptoms of aneurism of the first portion of the arch.

Thirdly, the presenile cases, forming the great majority, in which the attacks are associated with coronary artery

sclerosis as part of a widespread degeneration of the vessels. Hard work, mental more often than bodily, the stress and pain of modern life, excesses in diet and drink, are the factors most concerned, though why in individual cases angina should occur we can not say. There is another element as yet unknown, since in only a very small proportion of cases of coronary artery sclerosis does angina occur.

Fourthly, the senile group. After 70 angina is a not infrequent manifestation, a sort of terminal event in the cardiovascular degeneration. Death often results from an attack, or there may be a series of paraxysms preceding a final breakdown.

Traumatic Rupture of Internal Viscera without External Signs of Injury.

Weaver, W. G., claims there are yearly many unrecognized cases of rupture of the internal viscera, and deplores (*Pa. Med. Journ.*, July, '04.) the faulty diagnosis and expectant plan of treatment in these cases. The diagnosis is often difficult, largely because the amount of shock is not in proportion to the injury. The order of frequency with which the individual viscera are injured gives kidney, liver and intestine as most liable. Histories of six cases are given formulated from the experience gained.

1. Traumatic rupture of internal viscera, with little or no external evidence of injury, is much more frequent than usually supposed, and every case in which such injury *possibly* exists should be watched most carefully, so that, in event of the symptoms becoming aggravated, an exploratory operation may be performed in time to save the life of the patient.

2. We should not place much reliance in the pulse or temperature in this class of injuries, as they do not afford a safe guide within the period in which operation will be of avail in saving life.

3. The blood count affords early evidence of severe injury, and it should be used in every case in which internal injury is suspected.

4. Rigidty of the abdominal muscles, attended with dullness, even slight in degree, and local tenderness, are most valuable points in the diagnosis of these injuries, and where they exist, and, especially if a blood count shows an active leucocytosis, operation is demanded and no time should be lost in performing it.

5. It is very hard to convince the patient and his friends of the actual condition, and they will invariably plead for delay. The serious condition should be early pointed out, and every effort made to secure consent to operate while the condition of the ptient renders success probable.

6. These cases are almost inevitably fatal without operation, and the effect of an exploratory incision while the patient is in fair condition is not serious enough to counter-balance the advantages to be gained if rupture of any of the organs is found to exist.

Oral Infection and Sterilization.

M. L. Rhein, M. D., D. D. S., in the *Jour. Am. Med Association* claims that there is a lack of requisite training of medical students in dental principles. Oral infection is shown (1) Where local pathologic conditions are symptoms of constitutional disease, and (2) Where mouth infection is the exciting cause of other constitutional troubles. When the changes in the local appearance of the gums are merely symptom-

atic of some constitutional disease the actual local symptoms continue to increase in severity with the progress of the disease, and in consequence the appearance of the gums in these vital diseases become great aids in prognosis. When the gums become infected through depreciation of the vital parts, pyorrhoea alveolaris is produced. Discharges from the alveorlar sockets being swallowed cause irritation of the digestive tract, and absorption of the toxins becomes an additional menace to the patient. It is to be treated by removal of original cause of the trouble, and enforcing capable local treatment by removal of every form of concretions from teeth and roots and carefully polishing of teeth and exposed portions of roots. Preventative treatment consists in the cleansing and polishing the teeth at frequent intervals.

Infection arising in the mouth is caused by neglect in the care of the teeth, and irritation from badly fitted crowns and wedges, injudicious separating of the teeth, etc., resulting most commonly in alveolar abscess. Treatment consists in thorough asceptic removal of every portion of the contents of the root canal, its thorough sterilization and subsequent hermetical sealing. In chronic cases it is sometimes necessary to remove portions of necrosed bone.

NEGLECT OF MOUTH INFECTION.

In closing, I wish to call attention to the serious neglect by the general surgeon of the evil effects of mouth infection. As stomatologists we realize how small a percentage of people keep their mouths in an aseptic condition. The modern operating room is replete with every aid and contrivance that can assist in aseptic surgery. Clean aseptic garments are a necessity to every attendant, the mouths of the operator and attendants are covered with sterilized materials; the hands of the operator and assistants are covered with sterilized gloves; the patient is carefully prepared for the operation in every respect, except that of his mouth, which frequently is filled with sapremic, if not with purulent effluvia. I leave it to the logical imagination to picture the result of such conditions, especially in intestinal surgery."

Diarrhoea in Adults.

After some remarks upon the name and pathological changes in the disease, Scott says (*Cent. States Medical Mag.*) the eating abuse is the cause of the greatest number of cases of diarrhoea in the adult. Idiosyncracies in regard to certain articles, impure foods, unsanitary preparation, rapid eating, imperfect mastication, over-eating, taking too much liquids with meals, etc., are some of the causes of diarrhoea. Sudden falls of temperature—20 to 30 degrees are sometimes productive of diarrhea, and increased secretion of bile as well as scanty secretion of pancreatic secretion. It accompanies many acute infectious diseases, as cholera, typhoid fever, septicemia, etc.

In treatment the first in importance is to attend to the hygienic and dietetic conditions. Medicines are administered first to remove the irritating, indigestible, and putrefactive materials. Second, relief of pain and tenesmus. Third, promotion of intestinal antisepsis. Caster oil, or calomel and soda aa gr. v, will accomplish the first and may be all the treatment needed. If much pain a hyperdermic of morphia is indicated. Opium in some form is nearly always requisite, but it should not be given sufficiently to check the

diarrhea at once. Local applications of turpentine and heat are useful adjuncts. Intestinal antiseptics that can be used are Bismuth salycilate, Bismuth subnitrate, calomel, $\frac{1}{8}$ to $\frac{1}{4}$ gr. doses repeated every hour. Salol and sulphocarbonate zinc. Intestinal antiseptics should be followed by brisk cathartic. Strictly antiseptic food should be taken.

The following formula has proven valuable:

R. Benzo-napthol gr. 2
Bismuth Salicyl gr. 5
Resorcic gr. 2

M. et. fit. pulv. Sig.: One every 3 hours.

Tannigen 5-15 grs. three times a day is useful in severe cases. Abstinence from food is the true and most rational method of treatment. In choleric forms the intravenous injections of normal salt water is advocated. Stimulants if indicated. Where the trouble is largely in lower bowels washing out with antiseptic solution is beneficial.

Attitude of the Profession Towards Placenta Previa.

Should we always proceed to delivery as soon as hemorrhage comes whether the child be visable or not? McIlwrath (*Can. Pract. and Review*) says we must be governed by (1) the extent of the hemorrhage, the death of the foetus which should then be delivered at once and also if mother is much weakened; (2) the certainty or uncertainty of the diagnosis, and (3) whether the hemorrhage was unavoidable or brought on by causes which could be avoided in future. Under directions as to what to do he advises to do a Braxton Hicks version, i. e., bring down one leg and *then leave the delivery to nature,* making only sufficient traction on the leg to check hemorrhage in the intervals of the pains and give such aid as may be required to deliver the after-coming head. When there is not dilation enough to reach the foot pack with iodoform gauze and leave four to six hours. Not safe to temporize unless patient is under skilled observation and professional aid easily obtainable.

The different bags and dilations are generally condemned as is also caesarina sections. Rupture of membranes is admissable if the pains are very strong and the head can be engaged at once. In post partum hemorrhage, pack uterus cervix and vagina with iodoform gauze. Solution suprarenal glands 30 grns. to pint of water thrown into uterus has shown good results. All operations must be under asceptic precautions.

Post Partum Hemorrhage.

J.W. Grovernor (*Buffalo Med. Jour. Sept.,* '04). It is difficult to define post partum hemorrhage. The amount of flow that would be considered physiologic by one observer might be classed as pathologic by another. Flooding after delivery that causes disturbance of the circulation and a sense of weakness is regarded as past partum hemorrhage by the writer. The paper deals only with the hemorrhage from internal surface of uterus and especially the placental site. The gravity is fully relized by every one who has witnessed a case. Its frequency is hard to ascertain but close observers estimate it as one (dangerous) in every 2,000 labors. The deaths are one in every 100 cases of post partum hemorrhage. The causes are uterine artery; mechanical obstructions; systemic derangement; meddlesome midwifery, and traumatism Whatever intervenes with or prevents the closure of the bleeding blood vessels s a cause of post partum hemorrhage.

The symptoms are profuse hemorrhage, relaxation of the uterus, pallor, desire for air, grasping respiration, dimness, rapid feeble pulse, dilated pupils, ringing in ears, cold sweat and syncope.

The treatment consists of using pressure, astringents, nerve stimulation, hot applications, etc. Pressure may be made over the uterus, through the wall and by means of an asceptic hand passed into the womb. Remove all clots and adhered pieces of placenta. Pressure through the uterus of the abdominal aorta is recommended. The womb may be swabbed out with a solution of perchloride of iron to 10 or 12 parts water, after all clots and placenta are removed. External massage of the uterus, hot salt injections in womb through a return cannula, cold application to abdomen, ice in the womb, hypodermic injection of ergot, vinegar in the womb, hypodermic injection of ether in cases of collapse. The foot of the bed should be raised higher than the head. The after treatment is important. No muscular effort or mental emotion should be allowed and stimulants used as indicated.

Proplylaxis is important and every pregnant woman should be well cared for as to her general health, anemia and derangement of the blood receiving especial care.

The points in this paper to which the writer wishes to call special attention may be summarized as follows:

1. The gravity of the subject.

2. Uterine atony the most frequent cause of post partum hemorrhage.

3. Meddlesome midwifery a prolific cause of post partum hemorrhage.

4. Profound anesthesia a causal factor of postpartum hemorrhage.

5. The need of watchfulness and alertness on the part of the accoucheur.

6. The treatment demands that the accoucheur be prompt and resourceful.

7. The necessity of not only contraction, but of the retraction of the uterus.

8. Although cases left to nature have recovered a do-nothing policy is strongly condemned.

9. The usefulness of prophylactic treatment, especially in cases which indicate the existence of a hemorrhage diathesis.

10. Heredity a causal factor of the hemorrhage dithesis.

11. The advantage of medical superintendence of pregnancy from its incipiency to its close.

12. The importance of after-treatment."

Damiania.

(*John Uri Lloyd.*)

(*Pharmac-Review.*)

Damiania is the name of a Mexican plant, the botannical name being *Turnera Aphrodisica.* It grows in the foothills of Lower California, and in its native country is sold loose in the leaves as tea is sold in our shops, and used as a beverage by the inhabitants. Ash damiania as it is termed, bastard damiania a plant resembling the true damiania in contour and odor is often shipped to the United States as substitute as is also the root and shrub. It is used by the Mexicans as tea is used here and may be likened to our sassafras shrub and its use as a tea. It is considered as a soothing and stimulating beverage, but is not used as an aphroclisial, or indeed for any of its medicinal virtues. It is used extensively by all sexes and ages, and none of the virtues (?) attributed to it in America are considered as belonging to the drug there. Its long continued use does not produce nervousness. The shot gun

prescriptions containing damiania, as phosphorus strichnia, nux vomica, etc., are probably accountable for the reputation it has heretofore held. The author closes with this:

"Resume. — Damiana shrub, its habitat being the peninsular of Lower California, inland from La Paz. It was introduced to American Medicine under a misunderstanding of its nature. It is not a Mexican drug, but a general beverage. Its qualities reside in a fragrant leaf, yielding to hot water a pleasant, harmless, tea-like beverage, which, so far as history determines, has been consumed from all time by the Mexicans, and is still so employed by all classes, men, women and children alike. It is a gentle stimulant or tonic, kindly in action, pleasant to taste, and acceptable to the stomach. Its medicinal qualities are mainly restricted, in Mexico, to cases where a gentle stimulant may be effectual, as in suppressed menses, in which it is desirable to administer a hot drink in connection with a grateful aromatic that will not disturb the stomach. In other words, Damiana is a homely, domestic remedy, innocent of the attributes under which, in American medicine, it has, for a quarter of a century, been forced to masquerade. Its American field is now restricted, but in its true position the use of Damiana herb, when it can be procured, is perhaps the most desirable form of administration, or a concentrated cordial representative of the drug, of exceptional freshness and of prime quality, palatable as possible, made to carry the full qualities of Damiana."

Preparation for Surgical Operations.

D. A. H. Gollet (*Am. Jour. Surg. and Gynic.*) emphasises the importance of thorough preparation of patients for surgical operations, especially when the abdomen is to be opened. In nearly all cases demanding operation involving the peritoneal cavity the hepatic function is deranged, the functions of the kidney, are defective, and intestines are loaded with toxic material and the general system is suffering in consequence. To submit such a patient to an operation is of questionable expediency. The preparation cannot be made in a day or two, but often times requires a week. The urine must be examined chemically and microscopically. When albumen and sugar are excluded there may be other products denoting danger. If the liver is not acting bile will be found in the urine, and the hepatic function must be restored. A combination of sulphite and carbonate of soda is used for this purpose. Recently sulpho lythin has been used with good effect in combination with diet, exercise, etc.

Bacteria in the Throat of Scarlet Fever Patients.

That the disease is produced by a contagium vivum and that every case receives its infection from a pre-existing one, are propositions which demand general aquiescence, say Shamberg and Gildersleeve, in September issue of *Medicine.*

Various observers are quoted who have labored during the past quarter of a century, to discover the specific agent concerned in the disease. None of the conclusions reached have been accepted by the profession. In a series of one hundred Bacteriological observations of the throats of scarlet fever patients made in the Municipal Hospital of Philadelphia, they found:

Streptococcus in 88.. cases
Staphylococcus in 73 cases
A diplococcus corresponding to

that of Class in.....15 cases

From the throats of one hundred apparently well persons cultures were made and 82 per cent. showed streptococcus. Streptococcus is found in many other infectious diseases and cannot therefore be considered pathognomic of scarlet fever.

From their studies they reach the following conclusions:

1. Streptococci and staphylococci are to be found in the throat in the vast majority of cases of scarlet fever. It is significant to note that streptococci are present in a very large percentage of apparently healthy throats.

2. Both organisms are undoubtedly frequently concerned in the complications of scarlet fever, but are not to be looked upon as the specific agent.

3. Diplococcus described by Class M, as the cause of the disease was found by us in but a comparatively small percentage of cases. We cannot regard this organism as being any etiological relationship to the disease.

4. The interesting findings of Mallory, of protozona-like bodies in the skin of scarlet fever patients, will doubtless stimulate research along these lines. It is possible that the failure in the past to discover the contagium vivum of the disease has been due to the fact that almost exclusive search for vegetable parasites has been made.

Early Symptoms of Pulmonary Turberculosis.

Dr. G. C. Johnson, (*American Medicine.*), considers the following symptoms suspicious as indicating commencing tuberculosis. Grouped according to their importance they are:

1. Cough.—A slight, hacking, persistent cough, which can be referred to the larynx or upper trachea. It is worse at night or upon laying down. There is little or no expectoration.

2. A failing appetite.—There is a repugnance for fatty foods and some degree of indigestion.

3. Loss of weight.—Patient is a few pounds below his average weight.

4. Sleep sweats.—Upon lying down, day or night, the patient awakes with neck and upper chest bathed in warm or cold perspiration.

5. Accelerated pulse.—A pulse of ninety to a hundred, which is quick, irritable and ill sustained.

6. Elevation of temperature.—This is an unobtrusive symptom, but is of the highest importance. When a case of beginning tuberculosis is suspected, a temperature record at 2:30 p m. on several successive days should be insisted upon. A temperature elevation of one degree is a symptom that must be accounted for absolutely by some other condition, or tuberculosis must be suspected and confirmatory symptoms searched for.

7. Fistula in ano.—When syphilis is eliminated, this condition calls for careful examination of the chest.

8. Pleurisy with effusion.—A history of pleurisy with effusion in a patient who complains of any of the above mentioned symptoms is important.

—*Central States Medical Magazine.*

Induction of Premature Labor.

(*International Journal of Surgery.*)

Coe states that while he believes in elective obstetrics, as opposed to the blind confidence of the older school in the unaided natural forces, he cannot accept without protest the growing tendency to extend the indications for operative midwifery, so that it may keep pace with the development of modern surgery. In Caesarian section our very success has led to an exten-

sion of the indications far beyond the limits originally prescribed for it. The same criticism applies though in a lesser degree, to the relative frequency of the more common obstetric operations, such as version and high forceps. He states that between this rash and unjustifiable interference without any reasonable indications and the unaccountable timidity of many practitioners, who hesitate and temporize until too late to effect the desired result, there is a middle course which is the proper one for the scientific obstetrician.

He discusses only two indications of all the obvious indications for operation. Namely, renal insufficiency and a disproportion between the head and the parturient canal. That it is only by careful observation of our patient during the latter months of pregnancy that we can recognize the danger signals and anticipate serious complications. To recognize a disproportion requires frequent examinations after the seventh month, both of the child and the mother's pelvis. He disapproves of the time-honored practice of introducing a bougie and finds that gauze-tampon is the most satisfactory. He introduces three or four yards of gauze thoroughly distending the lower segment with the patient under an anaesthetic, rigid asepsis, good light, and sufficient assistance.

Tropical Abscess of the Liver.

(*Journal Military Surgeons.*)

Pinkham reports sixteen cases of tropical abscess of the liver that came under his care while operating surgeon in the Department Hospital at Iloilo, Philippine Islands. They all accompanied or followed amoebic dysentery, and were treated surgically. In this series of cases there were seven recoveries and nine deaths. Not more than six of these cases entered the surgical ward of the hospital with a correct diagnosis. In two of them the abscess was only suspected. In the other cases there was a wide range of diagnosis, embracing appendicitis, malaria (accounting for the chills), acute pleurisy, acute pneumonia, peritonitis, empyema, convalescence from typhoid fever, and delirium tremens with pain in the side. Gall stones,with or without suppurative cholecystitis, were apparently not thought of in connection with these cases, probably because the severe pain which usually accompanies this affection was absent. These errors in diagnosis, together with the total failure in all cases to recognize the disease in its early stages account, in a large measure, for the high rate of mortality. A prompt recognition of the complication and appropriate treatment might have enabled us to make a different showing.

He states that one interesting fact brought out by these operations is the demonstration of the freedom with which one may search through the liver tissue without dangerous hemorrhage. He protests against evacuation and drainage by means of the trocar and canula. He states that incision and drainage is surer and safer since we cannot be sure that the liver is bound to the wall by adhesions. He also advocates in obstinate cases of recurrent dysentery right inguinal colotomy and irrigation.

The Etiology of Tabesdorsalis.

(*Jour. A. M. A.*)

Brush states that all of our real knowledge as to the pathology of tabes dorsalis may be summed up as follows:

"That it is degeneration of the posterior columns of the spinal cord, or

of the peripheral spinal sensory nerves, or both; and that this process involves primarily the posterior spinal ganglia or analogous neurons, and later involves the cord and peripheral nerves. But how these changes are caused, pathology has as yet offered us no explantaion, and we must still rely for an explanation on the facts furnished by clinical observation.

Led by the high percentage assigned to syphilis, it seemed at one time as if the majority of the profession had adopted the theory that tabes was simply a sequela of spyhilis; and in those cases in which the occurrence of syphilis could not be proved, it was to be accounted for either on the theory that the infection was so slight that the symptoms escaped recognition, or on the grounds of heredity. This theory he denies and reports nine cases in which he assigns the cause of the tabes to trauma, alcoholism, and exposure to cold. The remaining alleged etiologic factors he divides into three groups:

1. Toxins formed in the body as the result of some contagious disease; 2, toxins formed as a result of metabolism; and, 3, those factors which act by lowering the general vitality.

Boric Acid Poisoning.

(*Jour. A. M. A., Sept.* 17, 1904.)

Best reports a fatal case of boric acid poisoning, with the autopsy findings. He states that the opinion appears to exist that boric acid, even in large amounts, is entirely innocous to the human body when applied externally to wounds, suppurating cavities, etc. That this is erroneous and that the surgeon must be on his guard against its too free usage, as it is not impossible for a fatal issue to ensue, is shown by the literature, in which five cases of severe intoxication and four deaths are reported in addition to the case at hand. These cases all resulted from prolonged irrigation with saturated solutions of boric acid or the packing of large cavities with the dry powder.

Summarizing the reported cases it is found that the cardinal symptoms in boric acid poisoning are: Profuse vomiting, a papular rash over the face, neck and chest, and a weak, irregular pulse increasing before death. It differs only in its more rapid onset and course, the onset being immediate and the fatal termination in four days. The delirium and the slight rise in temperature are possibly indications of a greater degree of intoxication. The autopsy finding in the two cases in which a post-mortem examination was held are practically identical, one being entirely negative except for a congestion of the liver, spleen and gastro-intestinal tact and a cloudy swelling and granular degeneration of the liver and kidney cells. In the other we have practically the same findings, with the addition of subpericardial hemorrhages and fatty changes in the liver and kidney, together with discoloration and maceration of the tissues about the cavity in which the boric acid was placed.

Sea Water as a Vital Elixir.—Unexpected light has been thrown upon the Darwinian theory of the evolution of species by an interesting paper on sea-water, read recently by M. Quinton before the Paris Academy of Sciences. Says a report in *The Lancet* (London):

"In Mr. Quinton's view sea-water is the natural source from which, as Haeckel believes, those elementary bodies have their rise, which in turn develop into every other species, human

being included. The environment in which the anatomical elements of living creatures exist is neither more nor less than a marine one. Our tissues and cells continue to exert their functions in a fluid the composition of which presents the closest resemblance to that of sea-water. Hitherto the number of elements entering into the composition of a living body has been considered to be about 15. But the researches of M. Quinlon have shown the existence of traces of at least some 14 other elements which are also found in sea-water, such as copper, lead, silver, gold, and others. Further, if an animal be bled to exhaustion and the place of the blood be supplied by sea-water, on the morrow the animal will have regained its strength, and at the end of five days its recovery is complete. M. Quinlon has injected into animals a quantity of sea-water greater than their own body weight without any toxic effects, whereas an injection of pure water rapidly brings about death. Sea-water then appears to be the true nutrient fluid of animals, their natural plasma, in fact. M. Perrier, who introduced M. Quinlon's paper to the meeting, did not fail to point out to what recondite philosophical theories these facts might lead."—*Literary Digest*...

Beats Christan Science.—A story is told of a small boy, green apples, and Christian Science.

"I found one of my constituents," said he, "trying to give some medicine to a young son who had eaten too many green apples, while a Christian Science neighbor was assuring the boy that there was nothing at all the matter with him.

"'I thing I ought to know," groaned the boy, "I guess I've got inside information."

The Idea of Gross Cleanliness in Surgery, and its Harmful Results.

(*Medical Record.*)

Morris states that modern surgeons are apt to smile at the term "ladable pus," and yet the earlier surgeons were not so far wrong in their nomenclature after all. That along with the teaching of scientific cleanliness there is developed the idea that wound discharges in general are unclean, and are to be removed; that it is an idea of gross cleanliness and that the application of the idea is full of harmful consequences. He considers three classes of cases in which skilful neglect would be advantageous. Namely: Those in which we are to have epithelial repair; those undergoing connective-tissue repair, and cases in which we are to have endothelial repair.

A case illustrating the first class would be an open incision wound of the arm, with granulations well under way. If the pus is wiped away whole rows of epithelial cells are destroyed and an undue amount of connective tissue formed, resulting in a larger and harder scar. The same is true if washed with an antiseptic and to a less degree with sterile water. Normal salt solution does harm only from mechanical injury. Such a wound should be dressed with a protecting medicine like silver foil, cargile membrane, or Lister's silk. The second class is represented by a foecal fistula where in our ideas of gross cleanliness we corrode the delicate granulations and distend the contracting orifice with sterile water or antiseptic solutions. An example of the third class is appendicitis with extensive peritoneal infection. If



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we open the abdomen quickly, remove the appendix and do not stop to make too careful cleansing of the peritoneum, the patient has a good chance of turning the tide of battle, but if we believe it is necessary to get the peritoneum visably clean by wiping and washing the patient is deprived of much of his material resistance and may die.

Uses of Carbolic Acid. (*Albright's Office Practitioner*). Carbolic acid is the only drug that combines cauterant anesthetic, antiseptic, and antiphlogistic properties. Applied to open surfaces, abscess cavities, freshly exposed tissues and burns, in an undiluted state, it is harmless. Applied to fresh burns with skin destroyed, and tissues injured it relieves pain almost instantly. Applied to the surface with feather or camel hair brush, there is no absorption, as the acid forms with the serum of the blood, an impervious albuminate, and excludes the air and acts as an anesthetic. Dr. Allis says that it is less dangerous to introduce a gallon of pure carbolic acid into a purulent thoracic cavity than to pour a gallon of water with one ounce of the acid into the cavity. The pure acid in excess on a burn or in a cavity does no harm, while an excess of a diluted solution is dangerous. Use full strength acid, dissolved from the crystals, applied all over the raw surface, and cover with cotton batting. In burns no other local treatment is needed.

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., NOVEMBER, 1904. No. 11

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL

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EDITORIAL.

Advice to Young Doctors; Sick Room Manners.

We once heard a lady, the daughter of a prominent physician, and with exceptional advantages in other ways for forming an opinion, comment upon the manners of physicians in general in the sick room. Her criticisms were broad and scathing, but not wholly unjust. The deportment and general bearing of the doctor in the presence of the patient has much to do with both the immediate effect of the treatment instituted and the remote results of future success in building a practice. The influence of his presence should always be beneficial, but can be marred or even made positively injurious by his demeanor. There is much in suggestive therepeutics, certainly more than we know, or possible care to acknowledge, and the doctor's air can be made of therepeutic value by judicious care. It is probably the want of tact on the part of the physicians that is most criticised, though good judgment and discretion are often wanting in the sick room.

The first consideration is that the doctor shall be master of the situation. Any vascillation or hesitancy on his part will be felt by the patient or friends and will marr his future usefulness and prospects. This is best secured by perfect ease of manner, and it should be cultivated until it becomes natural with him, really a second nature. A graceful carriage and urbane presence are desirable, but these are not essential. Confidence in one's self in the ability to control the situation, and in one's mental equilibrium, will inspire the confidence of the patient. This will place the patient at ease, and is a point in the doctor's favor. Faith in the doctor will accomplish wonders, and without it the doctor is seriously handicapped.

The first visit of the young doctor to a family—is a trying one—more so if it happens to be a prominent family and strangers. He is under close observation and everything he does, from the way he manages his feet and hands to the examination of his patient is noted and criticised. He should there-

fore be very careful to neglect nothing that will benefit his patient, and try to avoid giving offense by his manners.

Greetings to the family and a few words of pleasantry to the patient except in very serious cases or of severe pain are admissable before proceeding to an examination of the patient. A few minutes spent in general conversation accustoms the patient to the presence of the doctor. There is often, even with the family physician of several years' standing, an undercurrent of nerve tension with the patient on the arrival of the physician, that should be quieted before proceeding with the examination. Close observation will detect this in the expression of the patient's countenance and it is very frequently noticed in the character of the pulse. It has been our custom for many years to count the pulse of patients twice at least, generally the first and last acts of examination. When this nervous tension is very pronounced it is well to interject into the first part of the examination matters on other questions. Combine general conversation with an occasional question pertaining to the illness until the patient is fully at ease. We have found it often advantageous to suspend the direct examination of a patient, and engage in a few minutes conversation with friends present or even with the patient.

The doctor should be seated near enough to the patient that conversation may be carried on easily, and where the light will be on the patient's face. Do *not* sit on the edge of the bed occupied by the patient. If the patient is at ease, proceed to get the history of the case, if a first visit, or otherwise the conditions and symptoms observed since last visit. The questions should be direct and pointed, and insist upon like answers. This last will be almost imperative in many patients, and much cross questioning be required. Such are unsatisfactory, but no impatience can be manifested. Often it will be necessary to seek information from other parties, and occasionally out of the hearing or presence of the patient. This is nearly always so in children and young people.

The tone of the voice should be smooth and modulated to suit the character of the patient, the distance between you and the general surroundings. The doctor should keep the patient's interest centered upon the fact that it is his purpose to ascertain the conditions present and the cause of the illness. He should show by his manner and the care with which he proceeds with the examination that he is in earnest in the matter, and that it is for the benefit of the patient. He may be able to make a diagnosis at a glance, or with but little effort, but the young doctor cannot afford to stop with a cursory examination. Such a course is detrimental to a well established practitioner and would be disastrous to the young doctor trying to build a practice.

Rough jokes may be appreciated by some patients, but the sick room is not the place for them and the doctor is not the one to either repeat or perpetrate them. The repetition of some anecdote or a bit of humor may be admissable when it is desired to change the current of thought in the patient, but judgment and discretion in their use is very essential. Undue familiarity in the examination of a patient is to be avoided. The patient must be impressed with the importance of medicine as a science, and a disposition of levity and familarity on the part of the doctor will not do it. Obscene language and vulgar allusions are much

worse, and should never be indulged in. These are considered admissable in many sections while in attendance upon obstetrical cases, but the doctor who avoids them will be the more respected.

Sympathy for the patient and especially for great suffering is always appreciated. This, though, may be overdone and is sometimes very much misplaced. It is highly injurious to the very nervous and hysterical patient, and great care should be exercised in giving expression to words of sympatny to these classes. Tenderness in the conversation and in the handling of patients is their due, and the doctor should not fail to give it to them.

The physical examination of the patient should be thorough, but no unnecessary examinations should be made. Most patients, and especially females, object to exposure, and this should be respected when a diagnosis can be made without it. When necessary, it is better to proceed with it as a matter of course, and there is nothing else to be done. Yet with this the patient and friends will appreciate any efforts on the part of the doctor to make the exposure as small a degree as possible.

The writing of the prescription or the preparation of the medicines requires great care on the part of the young doctor, for this is the part in which centers the greatest interest of the patient and family. A few moments should be spent in rapidly reviewing the symptoms and making the diagnosis. The directions for administering the remedies and the instructions as to the hygienic care of the patient, diet and nursing, should be clear and explicit. As few words as possible should be used and given as if there was no doubt as to being implicitly followed. In no position can the doctor command more respect than in the manner of delivering his instructions for the care of the patient, and nowhere will hesitancy and vacillating be more disastrous. He has made the examination, arrived at his diagnosis, planned his treatment, and now must show confidence in his judgment. A dictatorial spirit is not best, nor will direct orders be appreciated. Firmness and a spirit of assurance are essential.

These instructions and directions should be given the last thing before leaving. Combining social visits and professional work is rarely advisable. If, for any cause, it is necessary or desirable to prolong the stay of the doctor the instructions for nursing and administering the medicines should be deferred until he is ready to leave. In his leave taking he should be as positive, decided and as business-like as in any other part of his visit. To bid part of the family good-day, and stop for further conversation, or start out and return for an after-word shows an illy ordered mentality, and ought to be avoided. When ready to leave leave with a short ceremony—well wishes for the patient's recovery and announcement of time of next visit are all the ceremonies needed.

With all this it is not well to appear in a hurry—especially in the examination. Thoroughness is of more importance than a few minutes time gained. The point to be made is to leave as soon as the work is finished.

When possible to do so, the family's convenience as to time of visit should be consulted, and an effort be made to meet its wishes. Promptness in meeting such engagements is essential, and apologies or explanations must be offered for failure to do so.

The question of giving the prognosis of the case to the patient must be set-

tled with each individual case. In cases of doubtful recovery, it may not be best to let the patient know of the seriousness of the illness, but some member of the family should be informed of the dangers. This should be done for the benefit of the patient or the family and also for the protection of the doctor.

J. D. R.

The One Book Doctor.

An eminent North Carolina physician, ten years ago passed to the Great Beyond, used to say facetiously: "The only happy doctor is the one-book man." Elaborating this, he meant to observe that the doctor who had one book and stuck to it, who had one authority and followed it, who would stand or fall by what his oracle said, possessed an infinitely more contented mind than the one who, having numerous authors to consult, could not be satisfied with or put confidence in any of them.

As a general proposition, our text furnishes food for wide philosophizing. Happiness is certainly a relative term. We are told that to acquire it is the whole object of our existence; and yet how differently we all set about it! Whether it is best to narrow one's field of desire or to broaden the horizon of enjoyment; whether more pleasure is derived from tasting those delights that we have or from flying to those that we know not of, is altogether a question of individual taste and temperament. So it is with our doctor. If he thinks it wise to blindly obey some authority, of which his judgment approves, he is doing well to be content —to "stand pat." He is happy because he is secure in his belief of right. There is no Supreme Court in medicine, but we have masters, whose experience is as the highest law unto many. Plenty of argument is at hand for the "one-book doctor." Why should we not follow implicitly the dicta laid down by one excellent leader and be glad? Surely it were better to do this than to flounder through different and unequal authorities and emerge discontented and uncertain. What is to be gained by multiplying authorities? Is there any reason for knowing the other way if the one is practically successful? Why produce all this mental disturbance simply to find out what some other man thinks? Such things might be said in favor of the monobibliac.

But, it is questionable if the one-book fellow is really happy. Our philosopher did not fail to inject his more-than-ordinary sense of humor into his aphorism—and that is the kernel of the nut. The one-book doctor is happy only because he is self-satisfied, because he has the don't-care spirit and because he has contracted his capacity for happiness. What a wiser attitude it is to know whatever is in reach that we may seek the truest and best! And how broadening it is to feel that we are thereby educating our own judgment! It is not so much the acquisition of facts that we are after in medical science as it is the ability to use them intelligently.

Thus, our one-book man is happy in his own conceit; he is happy because he does not know what constitutes happiness; blessed, because ignorant. Our ideal man is never as happy one moment as he is going to be the next, because he constantly learns some additional truth; he is not happy in the sense of being contented, because there is always room for improvement. But he is happy in the consciousness of recognizing that there are many things in Heaven and earth not dreamed of in his or anybody's philosophy. H. A. R.

Explanatory.

Editor, The Carolina Medical Journal, Charlotte, N. C.

Dear Sir: The editorial in your July issue, concerning Everybody's Magazine, is unfair, for the reason that the statements made therein are not true. Dr. Todd of Minneapolis did not find any patent medicines advertised in Everybody's Magazine. We discontinued them when we bought the magazine from John Wanamaker. Everybody's Magazine has not backed down on any proposition. In fact, we did not delay the declination of patent medicine advertisements until the advertising section was crowded, but began the elimination with the first issue.

You will find that the above statement is absolutely true, and we therefore ask you to give as much publicity to this letter as you gave to the editorial in question.

Very truly yours,

THE RIDGEWAY THAYER CO.

John Adams Thayer, Advtg. Mgr.

We cheerfully give space to the above letter, as we have no disposition to do the publishers of Everybody's Magazine an injustice. Our information on which was based the comments in the July number of the JOURNAL was gained from an exchange. Dr. Todd was on the point of filling out a subscription blank for Everybody's as an evidence of his appreciation of the magazine's stand in excluding the advertising of patent medicines when he found (so our exchange had it) several ads of this class, some of which are mentioned. As the writer does not receive the magazine in question, he has no means of verifying Dr. Todd's statement or Mr. Thayer's claim, but in further justice to the publishers of Everybody's Magazine we will say that a later correspondent of one of our exchanges says that many of the objectionable features have been eliminated, and that the proprietors seem to be sincere in their efforts to cleanse the advertising pages of this class of matter.

J. D. R.

North Carolina's Early Law on Practice.

KINSTON, N. C., Aug. 24, 1904.

To the Editors—I noticed in THE JOURNAL, August 13, that you state in an editorial that Illinois had the first effective law regulating the practice of medicine. North Carolina really should have that distinction, her law having been passed in 1857. The remarkably high standing of her profession, which we believe to be higher than any other State, on an average, is due to her splendid medical laws, which have been "effective more than a quarter of a century JAMES M. PARROTT,

Member of the Carolina State Board of Medical Examiners.

—*Journ. Am. Med. Asso.*

All true except that the law was enacted in 1852.

Editorial Notes and Comments.

Sundown Journalism.

Dr. T. D. Crowthers, editor of the *Journal of Inebrity*, read a paper of more than passing interest, with the above title, before the Medical Editors Association at Atlantic City in June last.

The title is in anology to the "Sundown Schools—i. e., those schools that give instructions only in the evening. The evils of trying to do Journalistic work or prepare scientific papers for the instruction of the profession in the night, when the brain is fatigued

with the day's work is portrayed in glaring colors and the course roundly condemned. Sundown thinking and working will show its earmarks in the contributions given to the public. Man cannot do himself justice with an exhausted or fatigued brain. The best work is in the morning hours with the brain cleared and rested by a period of rest and sleep.

Those undertaking evening work for the press are prone to have recourse to active stimulation in order to whip up the flagging energies, and Dr. Crowthers claims that it is often possible to name the drug used by the character of the production. The stimulants in much of the literature of the day as claimed by one critic, can be aptly characterized as the direct products of coffee, beer, wine, spirits, and compounds of opium and cocaine.

The best literary work is not a by-product, thought out over the midnight lamp. Active men of the medical or any other profession, can not hope to write books, lectures or essays that will endure, after sundown. Its attempt is the cause of much mediocrity in the literature of the day, and that, too, from authors whom we have a right to expect better things.

A Lay Opinion of Doctors Advertising.

The following clipping from one of our papers is given as one view of the matter as seen by the public:

"*Doctors and Advertising.*—Why do doctors, as a class, object to advertising? Why, for example, is it entirely proper for the Emery-Bird-Thayer Dry Goods Company or the Wentworth Military Academy to advertise, and highly improper for Dr. Brown or Dr. Smith to do the same? The only reason we have ever heard advanced is this: The ability of doctors depends upon their intellect and other personal qualities, which, as they claim, it would be egotistical, and therefore immodist, to advertise and boast of, like a merchant or other business man extols the value and desirability of his wares.

Such an argument has many weak points in it. In the first place, it requires as high an order of intellectual ability to run a big business establishment as to cut off a leg or operate for appendicitis. Then the successful performance of these surgical tasks does not depend entirely upon brain power. A steady nerve, confidence in self, a certain degree of daring, long training and education, and an office clean, orderly and supplied with all modern appliances are perhaps more necessary than a high mental development.

Such possessions and qualifications as these first named any one who has them may lay open claim to in private conversation without the least offense Therefore it seems absurd for doctors to put a ban on newspaper advertisement. The object rests solely upon the observance of an antique custom which by this time ought to have become obsolete."—*Kansas City Journal.*

While the custom may be antique, it was founded upon principles as everlasting as the hills; principles that actuate the conduct of one generation towards another that has ever been the keynote of the medical fraternity as a profession. To laud one's own ability as a practitioner of medicine is and always will be, odious in the eyes of his colleagues, because it violates the spirit of ethics and jars upon the inner sensibilities of the cultivated intellect. The medical profession is a great and noble one. True greatness and real nobility are characterized rather by humility

and a retiring disposition than by arrogance and self-laudation. "Self praise is half a scandal" comes as near being true in the estimation of the public in the case of the advertising doctor as in any walk in life. Aye, yes, the custom is antique, but so long as the medical profession retains its present position in the ranks of the learned professions it will not become obsolete.

Change of Editors of the Pennsylvania Medical Journal.

Dr. Adolph Koenig retires from the management of the *Pennsylvania Medical Journal* and Dr. C. L. Stevens, of Austin, Pa., has been elected editor and publisher of the Journal. Dr. Koenig finds it imperative to relinquish this work in order to meet other responsibilities. He claims for the Pennsylvania Medical Society priority in the work of demonstrating that the transactions of a large medical association are of more benefit to the profession when published in Journal form than in one volume of transactions. Under his management the Journal has been a clean, well conducted publication, and we trust Dr. Stevens will keep it up to the same standard.

McCash in an address before the American Medical Association says there is a marked difference in the appendicitis of children and in the same disease in adults. The symptoms are apt to be marked and more insidious. The younger the child, the greater is the difference, and a correct diagnosis is often beset with difficulties. This is caused by their inability to locate pain, general restlessness, fretfulness and the unreliablity of the significance of temperature. The muscular rigidity of adults is obscure in the child. Vomiting is the most persistent symptom in children. If it persists for 24 hours accompanied with abdominal pain, and without adequate cause, appendicitis hould be suspected. Previous "bilious attacks" or periods of excessive vomiting are confirmatory of diagnosis of appendicitis.

First Honors at St. Louis.—It gives us pleasure to note that our good friends, William R. Warner & Co., have received the highest award—the Grand Prize—at the Louisiana Purchase Exposition for pharmaceutical preparations. This firm is well and favorably known throughout the territory in which the *Carolina Medical Journal* circulates, and the numerous friends of the house will be pleased to learn of their success.

Treatment of Multiple Warts by the Internal Use of Magnesium Salts.—A. Hall (*British Journal of Dermatology,* July 1904) says that it is a well known fact, although some are highly incredulous, that the magnesium salts through internal administration have a direct and specific influence in some way upon multiple warts. After the report of a case thus beneficially influenced, the author believes that a possible explanation may be that, granted the disease is due to a microorganism, it is one of poor resistance and may be destroyed by a very slight alteration of the soil; thus an increase of magnesium salts in the tissue juices, a small quantity of arsenic, thryoidine, etc., may be sufficient to retard the further growth of the organism, with consequent shrinking of the new formation and disappearance of the disease. Such a view is consistent with what we observe in other parasitic diseases.—*Medical Age.*

Selections From Our Exchanges.

Proprietaries.

During the meeting of the American Medical Association held at Atlantic City last June, representatives of the State medical journals conceived and promulgated the idea that mutual interests would be better served, a bond of sympathy and good will created between themselves, and the profession at large benefited by an association termed "The American Association of State Medical Journals."

One of their number whose bump of wisdom was more normally developed than that of some of those present, succeeded in having final action on the project deferred until the meeting of the A. M. A. at Portland, Ore., next year.

The points of special interest in their declaration of principles are, (1) No journal of this association shall accept an advertisement of a medicine which is not ethical, and "ethical" shall mean that the product advertised must have published with it not only the names of its constituent parts, but also the amount of such constituents, so that a definite dosage can be determined. Further, such product must not be advertised in the secular press, to the laity. (2) If a product is marketed under a copyrighted name, the manufacturer shall furnish with it the proper chemical name, and if not patented, then also the process of manufacture.

(3) All advertisements not covered by the above paragraphs, or which contain extravagant or improbable claims, shall be submitted to the executive committee for approval before they can be accepted.

If the representatives present had any desire or wish for anything further they did not express it, and it is fair to presume that they do not want anything more. Were an excessive or inordinate desire for gain present they might have demanded a share of stock in each company who patronized them or levied on a portion of their patrons' receipts—pabulum for the "kitty" as it were, but as nothing of this sort was done, they cannot be accused of having had the slightest mercenary or other improper motives when their declaration of principles was formulated.

If they are ever put into actual operation the "bond of sympathy" ought to be ordered exceptionally strong, as it is not difficult to foresee that the demands made upon it will be unusually heavy.

There is probably no question but that State medical journals, at least the more influential ones, can be conducted without a loss, without a page of advertising matter, as members of the State associations are in a measure morally bound to pay their subscriptions, if, in fact, the State association does not set aside a dollar or two from the annual dues of the members as a reserve for the expenses of their official organ, but the question of profit had better not be discussed.

It is also true that many independent medical journals could be issued regularly from month to month from the amounts received from subscribers, but it is safe to assume that medical editors and publishers "live not by glory alone," and do, undoubtedly, depend upon the commercial side for their maintenance and profit, to a considerable extent.

Notwithstanding the enormous circulation of some of the great daily pa-

pers of our large cities, but a small proportion of the excellent scervice we all enjoy is due to the amount received from subscriptions, and were it not for the general advertiser, the modern newspaper, with its foreign news department as completely served as its domestic, its elegant press work and fine illustrations, brilliant and lucid editorials written by men whose salaries run into the five figures, would dwindle to a mere job sheet, more despised than read.

As this project is scheduled to lie over until next annual meeting of the A. M. A. there is ample time for a thorough consideration of the subject, and although no prophet, nor the son of a prophet, we venture the prophecy that its consummation will never be accomplished—unless suicide is contemplated, and that the executive committee who are delegated to pass upon the propriety of proposed advertisements, will not be compelled to shorten their office hours nor curtail their outside work in order to perfom their duties.

Medicinal preparations of a proprietary nature possess a distinctive character as marked as that of individuals, due to the process of manufacture and fixed composition. Many of the better known preparations would not suffer by the publication of their exact formulæ, as, for example, when complicated laboratory machinery is required for their perfect manufacture, but this is not true of many well known preparations whose nature is that of a simple compound.

It is, however, also true that if the exact formulæ of certain proprietary remedies were known and taken to a number of skilled pharmacists for compounding the results would differ in nearly every instance.

It is not to be supposed that a preparation can always be duplicated providing the formula is known, but such a procedure would encourage substitution to an alarming extent, and in this fact lies the greatest danger. While substitution is probably not practiced as generally as some writers would lead one to believe, especially by the retail druggist or individual prescriptions, there is another form of substitution which, while in a sense is not deceptive nor fradulent, is nevertheless an imposition upon the original manufacturer and a source of positive financial loss to him.

A common example is the preparation Essence of Pepsin. Every druggist can make it, and practically all do make it, all perhaps using the standard formula, yet, write ten prescriptions and compare results! Compound Syrup of Hypophosphites is another example; this preparation can be found on the shelf of every drug store in the country, yet in appearance, taste and action all differ, and in many instances materially.

This form of substitution is found in the drug stores presumed to be of the higher grade, the store located on the principal street and the most prominent corner. The proprietor has a certain percentage more brains than his uptown or downtown competitor; he has the ability to develop his one time drug store into a department store with a drug department; he is patronized by the elite, and the high-priced doctors send their prescriptions to him for compounding.

Does this druggist substitute? Not much! He has sufficient intelligence to see beyond the extra dime or quarter profit he might make by using a cheap substitute for a high-priced proprietary; he argues that he charges good prices for his prescriptions and

can aord to buy all the high-priced chemicals and compounds that the doctor may write for, but his keenly developend mental equipment soon reaches the conclusion that there is a shorter road to wealth than by the prescription, via proprietary remedy, route.

By the aid of his knowledge of chemistry and pharmacy, and a few timely hints by the editor of his drug journal, he soon perfects an elegant imitation of a certain proprietary, which, strange to relate, often possesses more virtue and curative power than the original . (?)

He now calls upon Dr. So and So and the others who have favored him with their business, thereby conceding evidence of their confidence in him and mutely acknowledging their belief in his superior ability, and in a few well-chosen words convinces the doctor that it is foolish to pay one dollar an ounce, or one dollar a pint, for a remedy that can be duplicated for less than half that amount, as he supposes. The doctor's attention is called to the fact that he, as an intelligent and educated physician, can, of course, readily see that nothing is gained by adhering to the old and genuine preparation, and the result is, he prescribes the druggists' imitation product more or less afterward. By continual efforts in this direction, worthy of a nobler purpose, doctors are constantly imposed upon through a want of a proper knowledge of the facts, but who believe the statements repeatedly made by the interested parties.

That harm frequently results from lack of precaution on the part of the physician there can be no doubt, yet, the remedies prescribed are not always absolutely indicated and in many cases the expected results are not obtained, even when the genuine remedies are dispensed, but when this is the case under the best possible conditions, what can one expect from the use of imitations that are known to be such?

Apart from therapeutic views, it is unfair, venal, dishonest. Persons who further their own interests by appropriating the discoveries of others and who confiscate the products of the brains of their superiors, are conducting their business along lines which the self-respecting and conscientious physician cannot follow with profit ot himself, nor advantage to his patient.

Anything done that will make substitution easy, or which will enable the skilled but dishonest pharmcist to become a party to the deception of physicians, cannot but be looked upon as a step directly unwise, and in direct opposition to true progress and meritorious advancement.

The outcome of the plans proposed by the A. of S. M. J. will be watched with interest.

—*Editorial Albright's Office Practitioner.*

Paraffin as a Cosmetic Remedy.

M. D. Ritchie (*Laryngoscope,* August, 1904) from his observations of one hundred cases draws the following conclusions:

1. Paraffin is well adapted for use in prosthesis.

2. In comparison with other softer forms, paraffin with melting point of 110° F. sems to be the ideal substance for subcutaneous injection.

3. In the hands of the experienced operator, paraffin at melting point of 110° F. is inert. In fact, it seems justifiable to simulate the injected material, histologically, to so much fatty tissue, being frequently permeated and enveloped by minute trabeculæ.

4. Danger is practically *nil*, those unfortunate cases of necrosis, misplace-

ment, etc., being eliminated by radical surgical and artistic scrutiny.

5. When cold, sterile, semi-solid paraffin, free from water of evaporation and air, is injected into surgically clean tissue, the production of embolus is impossible.

6. One-twentieth body weight can be injected in a guina-pig. There is no danger to life in the correction of any deformity, however marked.

7. Since many other foreign materials are introduced into the surgery about the head, and since danger of paraffn is practically negative, undue timidity seems unwarranted. The accidents in work with melted vaselin and other liquid materals should not be considered in the statistics of today.

The Contagiousness of Scarlet Fever.

Interesting observations with reference to the contagiousness of scarlet fever at variance with popularly accepted beliefs and the beliefs we ourselves have inherited, are reported from Christiana. We are indebted to the *American Journal of Medical Sciences* for a report in abstract of observations by Aaser overthrowing the impression so deeply rooted in our minds that the desquamating epidermis is the chief factor in scarlet fever contagion, and that a child in the stage of exfoliation carries the important element of danger to others. Aaser has had unusual facilities to study these facts, having in the past seven years had under his care 3,800 cases of scarlet fever, of which number 79 had derived their contagion from patients who had previously been discharged as recovered. All patients sent out as recovered had been cleansed, and had ceased desquamating. For these reasons, and also because of the fact that many children who are exposed to desquamating scarlet fever patients do not contract the disease, Aaser believes that there is another more potent source of infection, namely, that of discharges from the nose, throat or ear, and he makes extensive observations on this point. He believes that safety to others lies not in recording a case as recovered as soon as desquamation has ceased, but in considering the patient still capable of transmitting the disease so long as there is any secretion from the nose or throat.

This subject is a matter worth recording, and we must feel it among the possibilities that further observations will confirm Aaser's contention. The practical importance of this theory needs no emphasis.—*Wisconsin Medical Journal.*

The Hall of Fame.

The Journal of Medicine and Science alludes to the fact that so far no physician's name has been placed in the Hall of Fame, tho' it is the profession that has, and is devoting more lives to the cause of suffering humanity than any other. The object of the Hall of Fame is to perpetuate the names of those of our republic who have done deeds or rendered service to humanity worthy of such honors. The medical profession can furnish numbers of such names, but it is not for such fame that they labored, and we cannot rest content so long as we have a conciousness of a duty well performed. If individual members of the profession have not made names worthy of perpetuation in the temple, the profession as a whole offers its history in the scourges prevented, the epidemics controlled, the alleviation of suffering, the lengthening of the generation of man, the bettered hygienic conditions, and the self-sacrificing spirit of its laborers as services worthy of the noblest of callings.

D. Reise (*British Medical Journal,* August 13, 1904) reports two cases in which gauze mops had been accidentally retained in the abdominal cavity after laparotomy. In one of these cases the foreign body, which had made ts way into the intestinal canal and there caused obstruction, was successfully removed by enterotomy. In the second instance, in the course of a laparotomy for rupture in the tubal gestation performed four years after ovariotomy, an aseptic mop was found enclosed in a cyst that had developed in the mesosigmoid. According to our present knowledge the retention of a soft foreign body in the abdominal cavity after laparotomy may be followed by one or other of these four results: peritonitis, penetration into the intestinal canal, discharge of the foreign body through an abscess formed in the abdominal wall or in the pouch of Douglas, and inclusion in a cyst. The author states that peneration into the intestinal canal occurs quite as frequently as external elimnation by an abscess. The passage of the foreign body into the intestinal canal may occur without suppuration, and its discharge by the anus need not give rise to any alarming symptoms. A foreign body such as an antiseptic compress or mop may, the author states, be retained within the peritoneal cavity for many years. In many cases of intestinal obstruction following the passage of such body into the intestinal canal, it is held to be better to have recourse at once to laparotomy than to attempt to dislodge the cause of the obstruction by purgatives. Several surgeons have had experience of the accidental retention of antiseptic appliances. In Neugebaur's practice a foreign body of this kind was left in the abdominal cavity in 10 of 1000 laparotomies, and Riese has had a similar exeprience in two out of 900 laparotomies.—*Medical Aage.*

Neuralgia.—Revue Medico-Pharmaceutique recommends the following formula as valuable in neuralgia:

R. Quinine valerianatis..gr. iss |10
Extracti hyoscyami.gr. 3/10 |02
Extracti cinchonae....gr. ¾ |05

M. Ft. pil. No. i. Sig.: Take two to four such pills daily.

Eye Bruises (Black Eye).—Merk's Archieves recommends the following:

R. Acidi acetici dil. 3v 150|
Tincture arnicae
Ammon. chloridei. aa ..3i 30|
Aquae dest. 3v 150|

M. Ft. lotio. Sig.: Apply locally.

Cystitis.—The Critical Review attributes the following prescription to Keyes, who recommends it as of value in the treatment of acute cysitis:

R. Liq. potassae. 3iv 16|
Ext. hyoscyami fl. 3vi 25|
Syrup aurantii cort .oz. iii 90|
Aquae cinnamomi q.
s. ad. oz. vi. 180|

M. Sig.: Teaspoonful in water three times a day.

Pepper recommends the following:

R. Potassii bromidi
Sodii bromidi, aa.....3ii 8|
Ext. belladonnae ..gr. iv |25
Ext. buchu 3i 4|
Syrupi sarsap. comp.
q. s. ad. oz. iv 120|

M. Ft. sol. Sig.: Tablespoonful three times a day after meals.

The Value of Ergot.—Aside from its therapeutical value in obstetrics, ergot has also the power to contract the capillary circulation, thus in pneumonia where the tissues are contracted and the arteries dilated, it produces good results. In pulmonary hemorrhages it gives relief. In hemorrhoids, if inject-

ed in small quantities, either alone or combined with some other drug, it acts promptly, and relief is frequently obtained. In uterine tumors, such as fibrous, growths, it should afford relief.

It has been recommended in skin diseases, such as eczema and scabies, but will do better work if sulphur is added, or zinc be used with it.

R. Pulv. Erogt grs. 20
Pwd. sulphur oz. 1
Lanoline oz. 1½
—*Medical Summary.*

How Alcohol Acts as an Antidote to Carbolic Acid.—*The Denver Medical Times* says that the action of alcohol when used as an antidote to carbolic acid is apparently purely chemical in nature, the nontoxic ethyl phenate or phenetol being formed. At least four times as much of the alcohol as of carbolic acid is required.—*Allrights Office Practitioner.*

In Germany when a person breaks down with consumption, he is sent to a government sanatorium, where he is kept until he recovers or dies. In the meantime his family receives a weekly pension from a fund to which the patient himself contributed when he was in good health. By this means the risk of spreading the disease is avoided.

Asceptic Surgical Technique Works gives the following summary (*annals of surgery*) of minimum requirement for aseptic work:

1. Materials to be sterilized in saturated steam in the autoclave, for one-half hour, under fifteen pounds' pressure; rubber gloves and salt solution under ten pounds' pressure. If there is not sufficient space in the autoclave for the gauze dressings they may be baked.

2. In hospitals without proper facilities for sterilization of absorbable ligatures, these to be obtained from reliable dealers whose business reputation is at stake.

3. An operating room which cn be easily cleansed, and *which is cleansed,* where the air is kept as free from dust as possible, where draughts are minimized, and where formalin fumigation is thoroughly and systematically practised.

4. A hot bath for the patient, and a cleansing and shaving of operating area the night before if possible (as an extra precaution). Just before operation, a second cleansing and sterilization with 70 per cent. alcohol or some equally efficient method.

5. Thorough mechanical cleansing of the hands, and sterilization by 70 per cent. alcohol or some method equally efficient.

6. Ten minutes' boiling for instruments, special attention being paid to taking apart clamps and haemostatic forceps, or at least unlocking them.

7. Caps, masks, and sterile gloves always to be worn, at least on major cases.

8. Warm sterile salt solution for irritation and washing.

9. Belief in the aseptic idea, fixed aseptic habits, and aseptic co-operation, on the part of all engaged in an operation.

10. Instruction of assistants and nurses as above set forth.

Frostbite.—In mild cases, J. W. Posthauer (*N. Y. Med. Jour.*) finds little treatment necessary. A mixture of equal parts of vinegar, alcohol and ammonia water acts well and may be followed by some soothing inunction, as zinc or lead ointment, or by painting with compound tincture of benzoin. In more severe cases he recommends friction with ice or snow, the applica-

tion of a mixture of equal parts of tincture of cantharides, bathing with turpentine, amixture of one part sulphurous acid and three parts glycerine, etc.—*Journal of Medicine and Science.*

Old Unreduced Dislocations.—De Forest Willard (*Journal of the American Medical Association,* September 24, 1904) says that early immediate diagnosis is the most important element in preventing the existence of old unreduced dislocation. With ether, the *x*-ray, and anatomic and surgical knowledge, a recent displacement ought always to be discovered by the surgeon. Immediate reduction by manipulation or open operation should follow.

An old, unrecognized dislocation should be carefully examined under the *x*-ray and ether to discover the extent of adhesions and the possibilities of effecting reduction without extreme measures. The manipulations to be practiced are practically the same as those employed in recent luxations, but greater caution is necessary. Failing in these, continuous extension in bed should be practiced for a week; the second attempt, without the application of extreme force, should then be made, the permission of the patient having been previously obtained to permit of open operation, if deemed necessary.

Open section should include division of all muscular, tendinous, capcapuslar and bony obstacles to reduction. When the socket is filled up with dense fibrous tissue, such tissue should be excavated and the head of the bone placed *in situ.*

Partial or complete excision of the head and of fragments in case of fracture will frequently be necessitated.

In cases that have existed more than a year, or where the original injury has been extreme, operation should be avoided unless pressure on nerves or blood vessels is seriously impairing the usefulness of the limb or giving pain, but resection should be practiced in bad late cases, with pain and serious symptoms.

Sepsis is frequent on account of the severity and length of the operation, and especially by reason of the non-resistive ability of the tissues due to the original injury and to repeated traumatisms from manipulaltive efforts.

Pain, disability, age, and occupation are the most important conditions in arriving at a decision concerning operation. When a limb is useful in its new posiiton, gives no pain or difficulty, it should be let alone.

In the after-treatment, muscular gymnastics, electricity, voluntary and involuntary muscular movements, and massage are very important measures and should be persistentlly employed. These manipulations require both patience and pluck on the part of the patient.—*Medical Age.*

Niels R. Finsen.—By the death of Niels R. Finsen, which occurred in Copenhagen last September, the medical profession has lost one of its most noble characters. For years Finsen had suffered from dropsy resulting from a heart lesion, but so wrapped up in his work was he that he would not take the time necessary to recuperate his health. He first attracted attention some ten years ago by the publication of a paper entitled "The Influence of Light on the Skin," in which he asserted that smallpox could be cured by the red-light treatment. From that time on his work lay in the direction of establishing his theory of the therapeutic value of artificial light rays on the skin. The curing of a case of lupus vulgaris so interested the Danish gov-

cinment that he was given charge of a small institution in Copenhagen, where many cases of skin affections that had been deemed incurable were cured by him. In 1903 he was awarded the Nobel prize in medicine. His death was undoubtedly hastened by his persistent overwork. In his all too brief career he established phototherapy on a firm scientific basis.—Medical Age.

A Law Against the Use of Cocaine.—A bill has been introduced in the New York State Legislature which goes farther than any other for the prevention of the use of cocaine. It forbids the sale of cocaine, either at wholesale or retail in any form or in any proprietary preparations, except on the written prescription of a duly registered physician or dentist, and any preparation of cocaine or salts must have a label affixed to the bottle giving the exact contents of the mixture.—*Journal of Inebriety.*

Will Cure Bite of Most Deadly Snakes

The prevention of death from snake-bite has been the object of a number of investigations recently undertaken, and two methods of treatment have been developed with a fair amount of success. One is the injection of a specially prepared antivenim, which acts as an antitoxin, and which has proved useful in many cases. The other is treating the afflicted part with permanganate of potash, which has the advantage that this substance can readily be kept at hand and does not require to be specially prepared and stored like the antivenim. The use of permanganate of potash for snake-bites was first suggested in India in 1860 by Sir Joseph Fayrer, and subsequent experiments have demonstrated the effectiveness of the treatment. These experiments, unfortunately, were interrupted by the English antivivisection laws, but recently they have been carried further by means of a device lately invented whereby chloroform can be administered continuously to an animal for a space of time in some cases exceeding 24 hours.

In experiments thus undertaken on a number of animals, such as rabbits, and cats, it was found that when the puncture caused by the snake's bite or for the introduction of the venom was enlarged by lancet into a small wound, which was then rubbed with a crystal of permanganate of potash, the latter acted as a complete antidote to the poison. Five or six animals injected with cobra poison, one of the deadliest of all reptile venoms, survived after receiving this treatment, and a similar number which had been given Dabola poison. A special form of lancet adopted for this purpose was exhibited recently at the Royal Society, London, and is intended for general use. It consists of a sharp steel-pointed blade inserted in a wooden handle which is hollow and contains several crystals of permanganate of potash. As soon as the victim is bitten a piece of cloth is tied firmly above the bite, which is then enlarged with the lancet and rubbed with the crystal.

It is intended that these lancets shall be sold as cheaply as possible at all postoffices in India, just as quinine is sold at present, and it is hoped that the mortality from snake-bites may be correspondingly diminished.

In the experiments with the animals it was found that the treatment was equally successful with all kinds of venom, and that the result obtained after five minutes had elapsed between the bite and the injection were as good

as when but half a minute intervened. It is believed that the outcome of this investigation, which in its various phases has occupied nearly 40 years, will be productive of widespread benefit.—*Southern Drug Journal.*

A Perfect Vacuum.—Prof. Elmer Gates, Director of the Laboratory of Experimental Psychology at Washington, claims (*Pract. Drugg.*) *to have* produced the first absolute chemical vacuum known to science, and from which he has created rays which exhibit strange phenomen never mentioned as accompanying the Rœntgen rays. The method of making the absolute vacuum was so simple and apparently effective that it is worthy of notice. He took a large thick test-tube, made of the hardest potash glass, whose melting point was at an extraordinary high temperature. Into this he poured, while in a liquid form, a much softer glass, whose melting point was at a comparatively low temperature. Allowing the liquid glass to cool gradually, it formed a solid mass with the tube. After attaching a suction piston to the mouth of the test-tube, the whole mass was slowly heated for about thirty hours. At the end of that time the softer glass became liquid again, while the tube still remained solid. By forcing the pistol outward the greater part of the molten glass was expelled. Enough was allowed to remain at the mouth of the tube to seal it by cooling in that position. Back of this stoppage there was left a space where there never had been the least quantity of gas, hence, a complete and perfect vacuum.—*Med. Times,* June, 1904.

The Treatment of Gonorrhea of the Future.—G. S. Peterkin, (*American Medicine,* March 5, 1904,) looks for improvement over our present methods along the following lines:

1. Biochemic research and observation along evolutionary lines will enable us to control the life of the microorganism and thus its infectous properties, and likewise comprehend the factors that decrease the susceptibility of the human body for the gonococcus and increase its resistance to it.

2. By construction of a syringe with due regard to the anatomy and physiology of the parts, one that can be used by the patient himself, and can be used both for anterior and posterior injections, that can be sterilized, and yet be so regulated that in anterior urethritis it will always inject a quantity of liquid corresponding in size to the individual patient's urethra and the inflammatory stage present, without forcing the sphincter. This, the author believes, Dr. Englebret, of Copenhagen, claims that he has accomplished.

3. The discovery and manufacture of a drug of such bactericidal and penetrative properties that it will, if applied locally, penetrate the tissues of the genito-urinary tract, kill the bactria, yet not injure the infected tissues.—*Med. Age.*

Brisk Anti-Cigarette Campaign in Chicago.—Dr. Reynolds, of the Chicago health board, having ventured to defend the use of the cigarette as tendtending to diminish the habit of spitting in public, has become the special target for attack on the part of anticigarette crusaders. Investigation appears to have disclosed the fact that chewing is much more common among messenger boys than cigarette smoking, and is a less cleanly habit, if not indeed more injurious.

Newer Materia Medica.

Respiratory Tract; Affections, Symptoms and Treatment.

(By Dr. Arthur B. Smith, Springfield, Ohio.)

The average physician is frequently vexed in finding a condition which resists his best efforts to bring about a cure. This holds good in almost every disease at some time or other, but particularly in affections of the respiratory tract, where there may be a great variety of symptoms in several cases of the same disease.

Almost every physician has a favorite prescription for coughs, bronchitis, laryngitis, etc., which he uses until suddenly it seems to lose its efficacy—why, no one knows. Then another remedy takes its place until it, too, fails to give the desired resut. It is rarely that one finds a cough remedy which will be consistently good in the majority of cases. Theoretically there appears to be well-founded objection to the use of cough syrups in general, but nevertheless there are times when nothing else gives satisfaction; therefore, the physician pins his faith to that remedy from which he and his patients derive the most good. It is not always easy to find such a remedy, but when it is once found, it is equally difficult to dispense with, and often the physician is almost compelled to resort to a routine treatment. In such cases, of course, he wants the best.

There are constantly being placed on the market new formulas for affections of the air passages. Some of these formulas are of undoubted benefit in some cases, but usually it will be found that the results are far from satisfactory. Many of them cannot be taken when there is any gastric complication, as is sometimes the case, because of consequent nausea and vomiting. Others seem almost invariably to act as cardiac depressants and are highly objectionable for that reason. With the advent of heroin, however, these disagreable features have, to a great extent, been avoided. Heroin, in the vast majority of cases, can be tolerated by even the most sensitive stomach, and, it any disturbance should occur, it can easily be obviated by decreasing the dosage and then gradually resuming the previous amount. Heroin can be prescribed, in cases which are complicated by an enfeebled heart, without danger of depressing effects. As compared with codeine, its sedative action on the respiration is much more powerful. The fatal dose of heron is said to be one hundred times the efficacious dose, while with codeine the efficacious dose is one-tenth of the fatal dose. In other words, heroin is ten times safer than codeine, and can be given in much larger doses, if necessary, without danger. It appears to exert a specific action on the center of respiration without causing disturbances of any other organs or centers, and there is no danger of acquiring any habit by its use.

In phthisical patients the well known lack of appetite and intolerance of various foods render it imperative to give remedies which will not in any way interfere with the digestive functions, while at the same time controlling or alleviating the cough and other distressing conditions.

Some time ago my attention was called to a preparation composed of a solution of heroin in glycerine, combined with expectorants, called Glyco-Heroin (Smith). Each teaspoonful of this preparation containes one-sixteenth grain of heroin by actual dosage. It is of agreeable flavor, therefore easy to administer to children, for whom the dose can be easily reduced with any liquid, or by actual measurement. It possesses many advantages not shown by any other preparation I have used, and has none of their disagreeable features.

In citing some of the cases treated with this remedy I shall not go into minute description of any case, but briefly state the conditions which existed and the results obtained, which were uniformly good.

Case 1. S. B., aged 16. Caught a severe cold while traveling. This developed into an unusually severe attack of bronchitis with mucous rales, pain, cough and some slight fever. Prescribed Glyco-Heroin (Smith) one teaspoonful every two hours, decreased to every three hours. After a few doses were taken there was a decided improvement, the respirations were slower and deeper, the expectoration freer and the temperature normal. In a few days the patient was practically well and able to return to school. No medicine except Glyco-Heroin (Smith) was given and the results from its use were excellent.

Case 2. W. L., aged 31. Acute bronchitis. Painful cough, with difficult expectoration, particularly when in a reclining posture. Glyco-Heroin (Smith) teaspoonful doses every three hours gave speedy relief and a cure was effected in a few days.

Case 3. S. W., aged 60. Chronic bronchitis. Had coughed for years, with expectoration of a thick, yellow purulent and very offensive matter. Had los flesh gradually until about twenty pounds below usual weight. No appetite, very constipated, pains all over chest, night sweats and insomnia. Patient on the verge of nervous prostration and greatly weakened. She was given bromides, a tonic, and Glyco-Heroin (Smith), the latter in the usual dose at intervals of two hours. The first few doses were not well borne, as they seemed to cause some nausea, but by giving a smaller dose and then gradually increasing it, tolerance was soon obtained, and the results were remarkable. The cough and expectoration greatly decreased, the appetite improved and the patient became much better in every way. The treatment was continued as before, except that the Glyco-Heroin (Smith) was given every three hours. In three weeks the patient was eating almost everything she pleased, and sleeping well. The night sweats had stopped, together with the cough, and, as the patient expressed it, she "felt like another woman." At present she is in perfect health and needs no medicine except an occasional laxative.

Case 4. B. E., aged 26. Severe bronchitis accompanying an attack of influenza. Various remedies were tried in this case with negative results until Glyco-Heroin (Smith) was given in teaspoonful doses every three hours. In a short time decided relief was obtained and the cough stopped permanently.

Case 5. R. L., aged 6. Capillary bronchitis with pains over chest, cough and difficult expectoration. Glyco-Heroin (Smith) administered 15 drops every 3 hours. After taking a few doses the condition was much improved, and a speedy return to perfect health followed.

Case 6. W. H., aged 5. Whooping cough. Spasmodic paroxysms of coughing, sometimes being so severe as to cause vomiting. Tenacious mucus was present, requiring great expulsive effort to loosen it. There was little fever, but the patient was much prostrated and weakened by the cough. Glyco-Heroin (Smith) was given in 10 drop doses every two hours with good results. This was combined with hygienic treatment, the patietn being given as much fresh air as possible. In a few days the condition was much ameliorated, the cough under fair control, expectoration was freer and easier to raise, and convalescence uneventful. The case was discharged cured and there were no unpleasant sequelae, the patient at present being in perfect health.

Listerine Dermatic Soap is an exceptionally meritorious article which will, we believe, be extensively prescribed by physicians for use in the treatment of diseases of the skin as the antiseptic and detergent properties of Listerine "Dermatic" Soap prove beneficial in the treatment of the various cutaneous inflammations and eruptions, in combating all vegetable and animal parasitic diseases of the sudoriparous and sebaceous glands and hair follicles, as well as for the relief of excessive and offensive perspiration.

In Spite of Teachers and Text-Books.—The days of the cotton jacket and the linseed poultice seem to be past. Perhaps the applications valued most highly by medical teachers at this time are the cold ones either in the form of ice-bags or cold compresses frequently changed. These when placed over the seat of disease, seem to give decided relief, to modify the temperature and to hasten early resolution. But in spite of their advocacy in the text-books, the rank and file of the profession do not take to them kindly. Antiphlogistine now enjoys perhaps greater popularity in the treatment of pneumonia and other acute respiratory diseases than any other local application. This popularity seems to be well-deserved. It may not modify the course of the disease t any great extent, but it certainly proves of the greatest comfort to the patient, and helps to ameliorate some of the troublesome symptoms which are characteristic of the disease. Antiphlogistine must therefore be considered a distinct addition to our therapeutic armamentarium.—*The Medical Standard,* March, 1904.

Battle & co., St. Louis, Mo., have just issued the third of the series of twelve illustrations of the intestinal Parasites, and will send them free to physicians on application. These illustrations are works of art and being true to nature are of real value to the profession.

Armour & Company offer Suprarenalin Triturates which will be found very serviceable by physicians as they supply the active principle of the Suprarenal substance in convenient form.

The Suprarenalin Trituates dissolve readily in hot or cold water; each contains a sufficient quantity of Suprarealin to make fifteen miuims of 1:1000 solution.

Man does not live by bread alone and it is also true that a publication cannot subsist on compliments. If you will take the Editor's word, no compliment reaches the heart like a renewed subscription.

Scientific Work on Coca.

It may be of interest to note that the Mariani products have not been merely pushed upon the market commercially, without any regard to scientific details. In the laboratories at Neuilly, France, the Coca plant is studied botanically and chemically to determine how best to develop its properties. From there thousands of plants have been sent to the principal botanical gardens throughout the world, and every effort is constantly made to study this substance and to afford others an opportunity for scientific investigation. This is related not as a matter of more praise, but to impress the fact that here is the largest manufactory of exclusive Coca preparations in the world. This could not have been so extensive, nor so successfully maintained through all these years, if it was not founded upon merit and conducted upon those liberal principles which unite all that is possible scientifically with mere commercial interest. Thus it will be seen, that whatever has been done toward advancing the popular use of this restorative substance, has been the outgrowth from the original conception of preserving the true qualities of recent Coca in a nutritive wine.

These are but some reasons why it would seem that whatever this firm has to present to its friends, the practitioners, should command consideration. Vin Mariani was nearly fifty years ago introduced to the medical profession. It has been endorsed by physicians everywhere, and whatever success has been achieved through it is due to those physicians who, having recognized its worth, have since continued to employ it.—*The Coca Leaf*, November, 1902.

Lactate of Strontium.

(*Paraf-Javal.*)

(*In Albuminuria and Diabetes.*)

The value of lactate of strontium in albuminuria, while recognized by prominent physicians in this country, is still unknown to the majority of practitioners, whereas in Europe, it fills a place in the treatment of kidney trouble unoccupied by any other remedy.

Like many other therapeutic agents, the rationale of the action of lactate of strontium is imperfectly understood, but a plausible theory is that it exerts a profound influence on the processes of nutrition and reduces the formation of alimentary toxines to a minimum.

Clinical facts show a great improvement in cases of albuminuria, when the solution of lactate of strontium is prescribed. This applies to the albuminuria of pregnancy, post-scarlatinal nephritis, the early stages of Bright's disease, and in some cases of hepatic glycosuria. *In the albuminuria of pregnancy it has been found advisable to combine the solution of lactate of strontium with some preparation of iron, preferably the tincture of the chloride, or Basham's mixture, and the same combination is recommended in post-scarlatina nephritis, while in the early stages of Bright's disease, it is advisable to place the patient on a milk diet.*

The Uric Acid Diathesis Conquered.—There is a class of diseases which are difficult to classify to diagnose. They are due to an excess of uric acid and faulty elimination generally. The patient may present himself complaining of one thing or another, but the experienced practitian will soon realize that uric acid is at the bottom of the trouble. In just such conditions Calcalith gives excellent results. An office test will prob-

ably show that there is marked acidity of the urine and such being the case the doctor will be safe in dispensing a score or more of Calcalith tablets ordering one taken every three hours with a glass of barley water. A second examination of the urine after a few days' treatment will show a marked improvement. Calcalith dissolves uric acid and concentrations and favors elimination and where there is any tendency to the formation of calculi the exhibition should be continued for some months. In less marked cases one tablet twice daily with a full glass of water and thrice weekly a teaspoonful of Salithia before breakfast will prove amply sufficient. In most of these cases there will be more or less bowel torpidity and small doses of calomel and podophyllin (with or without emetine) every few days will be a useful adjuvant to treatment. Diet should be carefully regulated and any digestive disturbance corrected. The Calchicine in Calcalith may cause free stools if full doses are given: If this results the dose may be lessened for a few days. A more cathartic action is desirable, however.

Reaping Ptomaines.—A great many people seem to think that it matters little what kind of material goes into the building of the human structure!

They feed on thorns and expect to pick roses!

Later, they find they have sown indigestion and are reaping ptomaines.

It's a wonderful laboratory, this human body. But it can't prevent the formation of deadly poisons within its very being.

Indeed, the alimentary tract may be regarded as one great laboratory for the manufacture of dangerous substances. "Biliousness" is a forcible illustration of the formation and the absorption of poisons, due largely to an excessive proteid diet. The nervous symptoms of the dyspeptic are often but the physiological demonstrations of putrefactive alkaloids.

Appreciating the importance of the command, "Keep the Bowels Open," porticularly in the colds, so easily taken at this time of the year, coryza, influenza and allied conditions, Dr. L. P. Hammond, of Rome, Ga., recommends "Laxative Antikamnia and Quinine Tablets," the laxative dose of which is two tablets, every two or three hours, as indicated. When a cathartic is desired, administer the tablets as directed and follow with a saline drought the next morning, before breakfast. This will hasten peristaltic action and assist in removing, at once, the accumulated fecal matter.

The American Pharmacal Co., Evansville, Ind., invites the attention of the profession to their ethical preparation, Quin-I-Pep Tone. Every physician who has tried it has obtained satisfactory results from its use in chills as it is the only tonic which if taken, the stomach retains, and usually stops the chill before the second one comes on. It is of especial use in cases of chills during pragnancy as it, unlike quinine alone, has no tendency to cause premature labor. Unlike sweet syrups of quinine, it does not cause stomach derangement, in fact it acts as a stomach tonic.

Kenney's Extract of Pinus Canadenis is a valuable agent in chronic diseases of the mucous membranes, and admirable for the removal of morbid discharges of every kind.

A Corrector of Iodism.—Dr. W. H. Morse reports (*Southern Clinic* for May) success in the use of bromidia, which he says has proved corrigental or iodism. Dis cussin g his results he says: Vomiting is so frequent and troublesome a symptom, in amny diseases besides irritation and inflammation of the stomach, as to demand much practical attention from the physicians. So, although the causes are various, and although we are actually treating a symptom for this symptom bromidia is remarkably effectual. We have all employed the remedy for colic and hysteria, two disorders where nausea and vomiting are as pronounced as they are persistent, and almost the first evidence of relief is shown by the disappearance of these disagreeable symptoms. It is quite as efficacious for the nausea and vomiting from ulcer or cancer of the stomach. There is nothing that will more quickly check the vomiting, and the hypnotic effect is quite in order.

There is no Substitute for Sanmetto in Acute or Chronic Prostatitis, Cystitis and Nephritis.—I have prescribed Sanmetto quite extensively in the last ten or twelve years, and I must say I like the remedy very much in all forms of genito-urinary troubles. I can find no substitute for Sanmetto in either acute or chronic prostatitis, cystitis and nephritis. I am not in the habit of giving testimony to priprietary remedies, but I must confess my faith in Sanmetto and shall continue to prescribe it as long as it gives results.

J. C. Dreher, M. D.

Plainwell, Mich.

Sanmetto in Atonic Conditions of the Genito-Urinary Organs Resulting from Chronic Urethritis.—I have used Sanmetto quite extensively as a genito-urinary tonic in chronic atonic conditions of the genito-urinary organs resulting from chronic urethritis, and have met with almost excellent results.

Will F. Schultz, M. D.

Covington, Ky.

Hagee's Cordial of Cod Liver Oil Compound is one of the most popular cod liver oil preparations on the market. All the nutritive properties of the oil are retained and the disgusting and neuseating elements are eliminated. Combined with hypophosphrites of lime and soda it offers to the profession a reconstructive of great value.

Hagee's Cordial of Cod Liver Oil Compound is one of the most popular cod liver oil preparations on the market. All the nutritive properties of the oil are retained and the disgutsing and nauseating elements are eliminated. Combined with hypophosphites of lime and soda it offers to the profession a reconstructive of great value.—*St. Louis Medical Review.*

The Misanthrope.

By Clinton Scollard.

He neither joys nor grieves,
But cavils and mistrusts;
His hopes are like the wizened leaves,
Swirled down the Autumn gusts.

He looks askance at Life,
If so be Mirth lurk near;
He has ill-humored Doubt to wife,
And is the slave of Sneer.

He makes a mock of Love,
And all that on her wait;
Yet, howsoe'er desire may move,
He can not rise to Hate.

Crimes of a former birth
Must wreak on him their spell,
Else why, while yet upon this earth,
Must he abide in hell?

—*The Smart Set.*

Medical News and Items.

(*Clipped largely from the Medical Age, Detroit.*)

Seaboard Medical Association.—The seventh annual meeting of this live society will take place in Washington, N. C., on the 6th, 7th and 8th of December. This society has grown beyond the anticipation of its early members and has become quite a factor in the social and professional life of the profession in the tide water section of Virginia and North Carolina.

The Farbenfabriken of Elberfeld Co. with offices at 40 Stone street, New York, have spent many thousands of dollars during the last 10 years in endeavoring to run to earth counterfeiters of the preparations made by them. Phenacetin is the drug usually adulterated by those scoundrels, by mixing a small amount of prenacetin with a large amount of acetanilid and selling the mixture as pure phenacetin. Recently a number of arrests were made in New York city of persons engaged in this nefarious business and it is believed evidence sufficient to send them to Sing Sing for a term of years is in possession of the authorities.

The Carolina Sanitarium, of Greenville, S. C., has recently been opened for the care of patients suffering from diseases of the nervous system and drug and liquor addictions. This institution is in the charge of Dr. L. G. Corbett, who was for six years assistant physician to the State Hospital for insane at Columbia, S. C., and had charge of the inebriates. For the past twelve years the doctor has been with the Keeley company in South Carolina, at their home in Dwight, Ill., and in New York. Hence he has had a long period of training for the work of which he is now in charge.

Dr. J. H. Marsh of Fayetteville, N. C., opened in that city on November 1, St. Luke's Hospital, as a private sanitorium for his patients.

In July two hundred and thirty-six ambulances were shipped from Indianapolis for Japan.

A large hospital is to be erected in Philadelphia for the study of cancer and allied diseases.

The new surgical building of Johns Hopkins Hospital was dedicated with elaborate ceremonies October 5.

New Orleans is to be the site of a hospital built by the United States government for Panama canal patients.

The editor of *Southern Medicine* announces the consolidation of that journal with *Gaillard's Medical Journal* beginning with the October issue.

Maj. Ronald Ross, the well known English authority on the mosquito theory of malaria, has arrived in the United States to visit St. Louis,, where he will lecture, and then go to Paanma as a guest of the Canal Commission.

Professor von Esmarch, of Kiel, who was recently the victim of an accident which disabled him for a time, has now recovered and is able to take his customary walks in the environs of the town. The venerable professor ii in his 81st year.

A branch laboratory is about to be established in New York by the Bureau of Chemistry of the National Department of Agriculture, and the work of

examining imported foods and detecting adulterations and imperfections will be conducted on a large scale.

It is stated that Drs. Ott and Hirsch, the two physicians in attendance on the Czarina during her recent confinement, received a special fee of 100,000 roubles in honor of the birth of an heir to the Russian throne. The ordinary fee is 25,000 roubles.

Maj. Oliver B. Simmons, in charge of the South Mountain Camp Sanatorium on the Pennsylvania State Forestry Reservation at Mont Alto, Franklin county, has reported, says an exchange, that since the sanatorium for consumptives was opened in June, 1903, about sixty-five patients have been received, and at present there are thirty there, most of whom will spend the winter in the open. Of those who were received for treatment 50 per cent. have returned to their homes, apparently cured.

..Illegal Use of a Surgeon's Name.—On the complaint of Dr. John B. Murphy, of Chicago, Dr. N. News Wood, president of the so-called Christian Hospital, was recently arrested and taken before Judge Holdom. He was released on $1,000 bonds, furnished by his wife. Dr. Wood was accused of violating an injunction granted in July, 1903, restraining him from using the name, signature, or picture of Dr. Murphy in connection with the Christian Hospital, or from representing that Dr. Murphy has or ever had any connection with the establishment. Former Judge George W. Brown, acting for Dr. Murphy, charged that Dr. Wood had been selling membership certificates bearing Dr. Murphy's portrait, and also was using the surgeon's name illegally.—*Medical Record.*

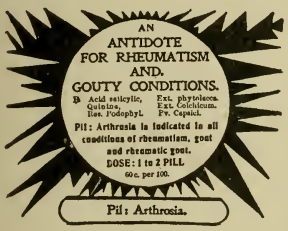
The authorities in Prussia organized last year, says an exchange, a number of training schools to fit persons for the public disinfection service. Fourteen have been in operation, each giving a course of at least nine days altogether, and restricting the students at each course to ten. Sixty courses have been given in all, with a total attendance of 601; 585 have passed all the tests and been duly qualified as "graduate disinfectors." The authorities have been so much pleased with the results accomplished that they are urging physicians to call the attention of suitable persons to these courses and advocate their attendance. It is hoped that every district will have one or more of these expert disinfectors residing in it. Special courses for nurses are also planned. It is found that the disinfection service has gained immensely in efficiency in the hands of the graduates of these schools.

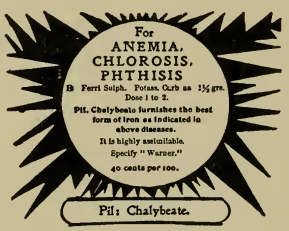
Wounded Russian Sailors at Hong-Kong.—During my stay at Hong Kong I visited, with Dr. Atkinson, the principal medical officer of the colony, the wounded Russian sailors who had just come down from the action at Chemulpo. They were in the General Hospital and were all doing well. Their injuries were mostly shell wounds from splinters. One case was serious, and in this instance the tissues of the forearm had been much torn up by a flying fragment. The men were all of exceptionally fine physique, and they lost no opportunity of expressing their satisfaction with their surroundings. The sisters said they made exceptional patients and it was wonderful how easily everything was managed, considering that their language was intelligible to none. Sir Frederick Treves in *Journal Military Surgeons.*

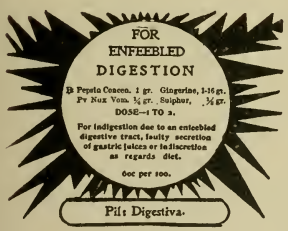
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Surgical Hints.

Pains over the iliac crests, the groins, the front of the thighs, the inner aspect of the legs of feet, or the big toe, are often evidences of lumbar caries.

If plaster-of-Paris bandages have become somewhat damp and do not set well, place them in an oven for about a half hour and they will greatly improve as the moisture is baked out of them.

It may be laid down as a certain rule, that the more frequently the surgeon anesthetizes for the examination, reduction and treatment of fractures and disloctaions, the greater will be his percentage of successes.

Vinegar poured on a towel or a piece of gauze, given to patients recovering from ether anesthesia as a prolonged inhalation, will do a great deal to prevent nausea and vomiting. It must be kept up as long as there are any evidences that the stomach may again be distrubed.

The gait of a child while coming down stairs is an important index to the presence of early vertebral caries. If he wants to be carried down, or is unnaturally cautious about the descent, and refuses to jump down the bottom stair and carefully holds on the balusters, our suspicions must be strongly aroused.

In order to examine a painful spot in a child, never take hold at once of the sore part. The child will immediately be frightened and oppose the examination by all means in his power. If you want to investigate a bad knee, for instance, handle the foot first with much show of interest, then take hold of the leg and calf and stroke them a few times. By this time the child, having felt no pain, will readily permit you to go on to the knee.

In children, steady complaints of pain about the head, the limbs or any part of the trunk, without visible signs of inflammation, should always lead to careful examination of the spinal column. A diagnosis of rheumatism is often groundlessly made in such cases. Headache may mean cervical trouble high up; pains in the shoulders or upper chest may be due to similar trouble lower down, while caries of the lowest cervical vertebrae may cause pain referred to lower down the upper limbs. Dorsal caries may produce stomachache or sensitiveness of the skin over the ilium.

Explosions often cause the cornea to be studded with particles of unburnt or partially burnt gunpowder. The eye should be placed under the influence of cocaine, and thoroughly washed out with saline solution. The grains of powder are then removed with a needle or preferably a spud or small spoon. An eye thus injured should be thoroughly protected from the light, and the application of pieces of gauze that are kept on a lump of ice will help to subdue the infiammation.

(An application, alike grateful to the patient and of benefit to the eye after removing the powder is:

R. Hg. ox. flav. grs. $\frac{1}{8}$.
Sol. adrenalin chlo. gtts., 3m.
Vaselene, dr. 1.

Sig.: Put some between the eye lids every 2 or 3 hours.

Ed.)

If You Have a Case of Anæmia

induced by defective nutrition — the result of a chronic digestive weakness, the first thing to do, of course, is to overcome the digestive trouble.

If the gastric juice is deficient in quantity and quality, the digestive glands must be stimulated and their proper functional activity restored. Iron, of course, is always demanded in these cases.

Ext. carnis, fl. comp. (Colden) No. 1, is of great value in all secondary anæmias. In addition to the necessary iron, it contains three of the most potent digestive excitants. Administered twenty minutes before meals, it will stimulate the appetite, increase the gastric secretion, promote normal metabolism, and overcome the anæmia. Write for literature.

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In any wound of the eye it is often a matter of difficulty to determine whether or not the eyeball has been penetrated. Particles flying with great force and entering the eyeball hurt much less than slowly moving bodies lodging upon the cornea or under the lids. In fact, foreign bodies are at times found within the eyeball when the patient can hardly recollect the cause of the damage. Any case of wound of the cornea, however small, should be referred to an opthalmologist. Pieces of percussion caps are very often found to enter the eyeball.—*International Journal of Surgery.*

Man does not live by bread alone and it is also true that a publication cannot subsist on compliments. If you will take the Editor's word, no compliment reaches the heart like a renewed subscription.

Dr. Samuel W. Lambert Appointed Dean of the Columbia Medical Department.—The Deanship of the College of Physicians and Surgeons of Columbia University, which has been filled by Dr. John G. Curtis, as acting Dean, since the resignation of Dr. McLane, in June, 1903, has been filled by the election, for the statutory term, of Dr. Samuel W. Lambert, professor of Applied Therapeutics. Dr. Lambert becomes *ex officio a member* of the Columbia University Council, of the Board of Trustees of the Roosevelt Hospital, and of the Boards of Managers of the Sloan Maternity Hospital and of the Vanderbilt Clinic. Dr. Lambert is a graduate of the College of Physicians and Surgeons in the class of 1885.

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The Health of Russian Troops in the Russo-Japanese War.—There have been so many conflicting statements with regard to the health of the troops in the Orient that the following facts from the Russian "*Official Messenger*" are of particular interest, although not of the most definite character. "Up to June 26th the number of officers and men in hospital amounted to 7.136 per cent. and 3.943 per cent. respectively of the total forces. If the wounded officers and men already removed to the rear are included, the percentage is 10.24 and 6.51. After the beginning of the rainy season—on July 9th—the percentage of officers and men in the hospitals rose to 8.384 and 4.646 respectively, the proportion of patients suffering from infectious diseases increasing from 2.19 per cent. to 8.52 per cent., including a percentage of dysentery cases of 1.99."—*Journal Military Surgeons.*

A Humanitarian Engine of War.—An officer of the Austrian army has invented a shell which when it explodes does not, as is the usual way, distribute deadly pieces of lead and steel to those in its vicinity, but liberates vast quantities of a gas which has the effect of stupefying all who are near it. One shell is said to contain enough gas to place 2000 men *hors de combat.* As the gas has only a temporary effect the adoption of this shell would make war much less horrible than it is at the present.

"I heard today that your son was an undertaker. I thought you told me he was a physician."

"Not at all. I said he followed the medical profession."

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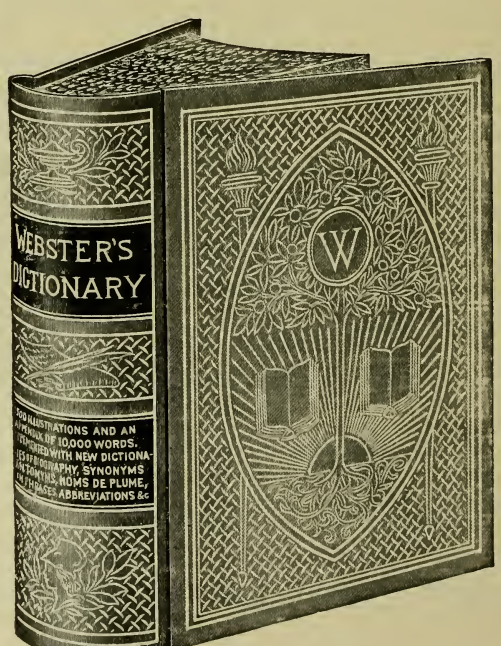
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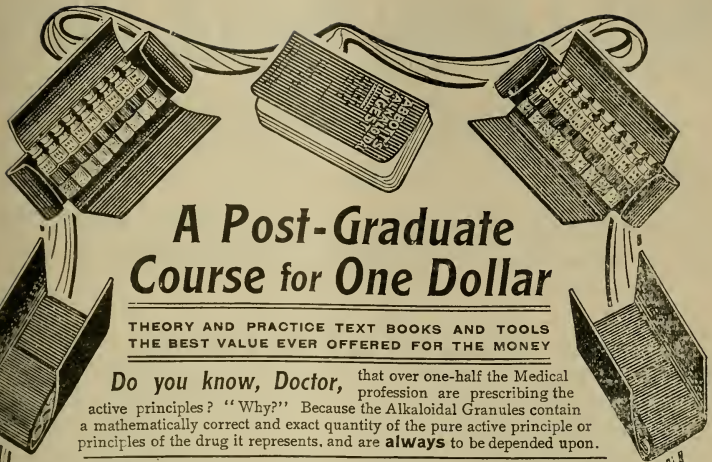
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Sir William Ramsay, the famous English scientist, is quoted with the following statement: All previous calculations in science are likely to be upset by radium. We may soon be compelled to revise some of the theories of physics that are now regarded as cardinal. Nobody can tell. The future open to the diligent laboratory student is fraught with mysteries. One thing is certain—nobody is likely to discover a mine of radium. Some statements made about the quantity of that precious substance in existence is absurd. I do not suppose there is a tenth of an ounce of radium in the whole world. If you can imagine getting that amount of radium together it would supply more energy than 250 tons of dynamite. Few persons who talk about radium and its components realize the great scarcity of the raw material for yielding radium or the exceedingly minute particles used in experiments that have astounded the world. It is impossible to say where the future supply of raw material is to come from. I believe that in America, carnotite looks promising as the basis for it. Cleavite, a mineral found in Norway, is also looked upon as a favorable source of supply.

There is, according to an exchange, in Paris a new school of psychology to to investigate such questions as mind reading, mental suggestion at a distance, clairvoyance, presentiments, automatic writing, double personality, etc. This school unlike most associations studying these subjects has for its members medical men almost entirely, whose professional duties bring them in close contact with these often curious phenomena. The members are followers of Charcot.



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100 CALOMEL—To do the same thing.
100 CALCIUM SULPH.—Systemic Disinfectant.
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The Lawson article is but one feature of an excellently balanced and readable magazine. There are seven rattling good stories and a large instalment of Hall Caine's great novel, "The Prodigal Son." The leading article in the number, on "New Fighting Machines," describes the latest devices of war, such as the new American rifle, the Japanese field guns, the last novelties in torpedoes, submarine boats, gun-powders, etc. Vance Thompson contributes an intimate study of the kindly old gentleman who is President of France, and Eugene Wood has one of his humorous discussions of health topics: "Is Bathing Good for Us?" The magazine also contains eight drawings of Washington by Vernon Howe Bailey, the clever artist whose series, "American Cities in Pencil," has attracted so much attention. *Everybody's Magazine* has now the largest news-stand sale in America.

Visiting and Pocket Reference Book for 1905.

The following is a comprehensive contents: Table of Signs and how to keep Visiting Accounts, Obstetrical Memoranda, Clinical Emergencies, Poisons and Antidotes, Dose Table, Blank leaves for Weekly Visiting List, Memorandum, Nurses Addresses, Clinical, Obsterical, Birth and Vaccination Records, Bills Rendered, Cash Received, Articles Loaned, Money Loaned, Miscellaneous, Calendar 1905 126 pages, Lapel Binding, Red Edges. This very complete Call Book will be furnished by the Dios Chemical Co., of St. Louis, Mo., on receipt of 10 cents for postage.

The Surgical Treatment of Bright's Disease by George M. Edebohls, A. M., M. D., LL. D., Professor of the Diseases of Women in the New York Post Graduate Medical School and Hospital; Consulting Surgeon to St. Francis Hospital, New York; 326 Pages; Frank F. Lisiecki, Publisher, 9 to 15 Murray Street, New York, 1904.

The author states that the time is not yet ripe for a complete, systematic presentation of the subject of the surgical treatment of Bright's disease. The subject is too modern, and too many questions relating thereto still await-

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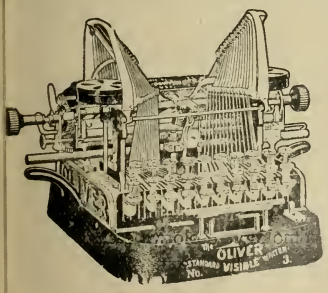
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Practical Dietetics With Reference to Diet in Disease: by Alida Frances Pattee, Graduate Boston Normal School of Household Arts; Instructor in Dietetics, Bellevue Training School for Nurses, Bellevue Hospital, New York City. Second edition, revised and enlarged. $1.00. Published by the author, 52 West Thirty-ninth Street, New York City.

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The Principles and Practice of Surgery, Designed for Student sand and Practitioners. (Lippincott's New Medical Series, edited by Francis R. Packard, M. D.): by George Tully Vaughan, M. D., (University of Virginia), assistant Surgeon-General, Public Health and Marine Hospital Sedvice of the United States; Professor of the Principles and Practice of Surgery, Georgetown University, Waashington, D. C. 569 pages. $3.25 cloth; $4.00 half leather. Philadelphia and London, J. B. Lippincott Company. 1903.

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DISORDERS OF METABOLISM AND NUTRITION: By Prof. Dr. Carl von Noorden, Physician-in-Chief of City Hospital, Frankfort-on-Main, and Assistants. Authorized American edition edited by Boardman Reed, M. D. The fifth of the series of monographs, "Saline Therapy," 75c, is now ready. The preceding issues are "Obesity," 50c; "Nephritis," $1.00; "Colitis." (Colica Mucosa), 50c; "Acid Auto-intoxicants," 50c; and will be followed shortly by Gout Diabetes, Limitations of Liquid Food, etc.

First Aid on Railway Trains.—The Pennsylvania Railroad has just adopted a plan for providing first aid to the injured. It consists in equipping all baggage, mail, express, construction, and wrecking cars, terminals, yard offices, shops, and important stations with stretchers; and locomotives, terminals yard offices, shops, and important stations with "first aid boxes." Each of these is a sealed tin box, containing six sterilized packets, consisting of one large triangular bandage, one ordinary bandage, two compresses, and two safety pins. All passenger and freight trainmen and the employes at terminals, yards, shops, and so on, where accidents are likely to occur, are to be instructed by the surgeons of the road in the primary treatment of wounds, fractures, burns, shock, etc., and the handling of the injured on stretchers. The employes will also be taught how to treat emergency cases of unconsciousness, convulsions, and persons overcome by heat. Plans are now being prepared for the construction of a hospital car, to be used for transporting invalids.—*Medical Record.*

The Patent Medicine Testimonial.—The marvelous sale attained by certain patent medicines has often caused many to wonder how it was achieved. The following from a lay paper shows how some of the extraordinary testimonials are obtained: "Remarkable testimony has been obtained by the postoffice department as to the ways in which testimonials are obtained by some of the big concerns engaged in this business. One large firm admitted that it had agents out seeking persons who had formerly occupied prominent positions in the community, but had suffered financial reverses and were harassed by debts they were unable to settle. The agents would obtain possession of the unpaid accounts, and would then apply pressure to the unfortunate victims, demanding immediate payment in full. Finally, after long persecution, the desperate victim would be invited or commanded to call at the at the office of an attorney, where he would be given to understand that if he would sign and swear to a testimonial a receipt in full for the claims against him would be given. This seems incredble, but the facts are now on file in the records of the postoffie."—*Medical Age.*

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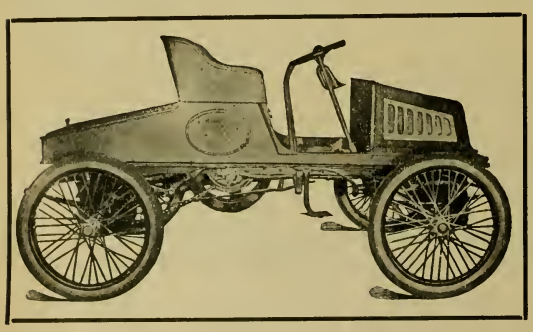
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ORIGINAL COMMUNICATIONS.

Surgery and Gynecology in Chicago.

By H. A. Royster, A. B., M. D., Raleigh, North Carolina.

(Concluded from November Issue.)

Ochsner.—Those who are keeping up with the progress of modern surgery are familiar with the name of A. J. Ochsner. His incessant energy, his rapid advancement and his recent work on "Clinical Surgery" have each drawn attention to him as being a man of no ordinary mould. The book, though laying no claim to literary merit, is a model of its kind. As an operator, Dr. Ochsner has few equals and no superiors. He is unique. Not only does he work with great rapidity, but he despatches the cases, one after another, without losing a moment of time. While he is finishing one, he gives orders for another to be made ready and the newly etherized patient comes in as the other goes out to be bandaged up. In this aggressive precision Ochsner surpasses other surgeons whom it has been my pleasure to see. He also operates with less nerve-tension than any human being I know. He is always alert, eager and watchful, but nothing seems to ruffle him—nothing removes his composure or makes him nervous and irritable. There is more of the automatic in his movements than I thought possible for anything but a machine. In a large measure this may be accounted for by his great experience and good assistants, but much of it is owing to the extreme rapidity with which he ties ligatures and introduces sutures. An original "stunt" of his is to always use a doubled thread for suturing, and to clamp the ends with a pair of forceps, so that the suture cannot possibly slip from the needle. Again, in tying, the forceps-end of the thread is brought up short, while the needle-end is carried through the loop and drawn tight, thus saving time, suture-material and religion. Like all Western surgeons Ochsner is very partial to catgut, using

it wherever possible. With the double thread he can, of course, employ smaller sized suture. Dr. Ochsner's ability as a pathologist and a diagnostician is certainly secondary to his operative skill, if one may judge of a man with such scant, superficial observation. He is not a clinician; in fact, he rarely talks while operating and when he does, it is only in a disjointed manner. One can hardly criticize him for this, for he does a tremendous lot of work and would probably never get through with it if he wasted any time. There is hardly a surgeon anywhere who does as much work as Ochsner. Most of his cases are at the Augustana (a Swedish hospital) and St. Mary's, and he begins promptly at 8 every morning. At my first visit to his clinic, July 22, he performed 10 operations by half-past twelve o'clock and seemed just as vigorous then as he had at eight. Twenty-five to thirty visiting physicians were always present at these clinics, as well as at Murphy's. I have notes of 29 operations which I saw Dr. Ochsner do, but, as many of them were duplicates, it will be necessary to describe only a few of the more striking ones. Of the whole number 10 were *appendicitis* cases, most of them being interval ones. The second operation I saw him do was a particularly interesting one. A child about 2 years old had an inguinal hernia, the contents of which were the cecum and the appendix, with a fecal concretion in the latter. This condition was correctly diagnosed by Ochsner before operation. His technique differs from Murphy's. He puts a clamp on the mesenteriolum, cuts the appendix free up to its base and ties the mesenteric stump around the forceps, with catgut; two hemostats are placed on the appendix, one ½ inch from the base and the other near it, and the appendix cut between them; a purse string silk suture is carried around the base, and, after loosing the forceps, the crushed appendiceal stump is invaginated into the cecum as the suture is tied. Leaving this long, it is used to close the peritoneal coat of the bowel over the area. In his *perineal prostatectomies* Ochsner makes the same incision as Murphy, but employs a prostate retractor and shells the gland out from each side, draining below and leaving in a catheter above for continuous irrigation, after the manner of Young. He does the high operation for *varicocele*. An *excision of the epididymis,* in a young man, for inflammation, gonorrheal in origin, which caused it to swell frequently with great pain, was a rather unusual procedure. The *hernia* operations would be perfect revelations to those who have been used only to see the classic Bassini or Halsted methods. Not only Ochsner, but almost every operator in the West, is carrying out the plan suggested by Ferguson of closing the wound by simply sewing it together layer by layer without transplanting the cord, or else doing the Andrews operation. Interrupted chromicized catgut is the most popular suture material. Such ideas as these do away entirely with the bugbear notions which have for a long time served to make young surgeons look upon an operation for the radical cure of hernia as an intricate procedure and have reduced it to a safe and simple affair. The McGraw elastic ligature was used by Ochsner in all the cases of *gastro-enterostomy* which I witnessed. He also employed this device in a lateral anastomosis, sigmoid to ileum, for carcinoma of the descending colon. This method must be seen to be understood and appreciated, and a description would be worse than

useless. I was especially pleased to see an *excision* of the *coccyx,* as that is an operation not often called for and rarely done. Dr. Ochsner's views on appendicitis are so well known that it would be entirely superfluous to discuss them here; suffice it to say that I am almost persuaded that his method of stomach washing, rectal feeding and no purgatives is the proper treatment for those cases which are "too early for the late and too late for the early operation." Ochsner does not as a rule wear rubber gloves. He reserves them chiefly for the dirty cases.

Bevan.—During the summer term at the Rush Medical College Dr. Arthur D. Bevan held the clinic of his associate, Prof. Nicholas Senn, who was then on his second tour around the world. I was, therefore, not permitted to see the latter surgeon operate, but Bevan's clinics were all interesting. He is an extremely dextrous operator. One can see at a glance that he was a former teacher of anatomy. His technique, as carried out in the Presbyterian Hospital, is perhaps more nearly perfect than any other in Chicago. He wears long-sleeved gowns and rubber gloves as an invariable routine in every operation. He presents his cases well, describes them clearly and his comments while working are always to the point. The only criticism I would have to offer is that, with the large number of assistants obstructing the view, it is very difficult for one to see the steps of any operation from the seats in the amphitheatre. As the light is miserably scant, one of the helpers is usually required to hold a hooded electric lamp close to the field of operation and this is an absolute bar to a proper observation. One of the students next to me said: "I can't see a thing; I might better go to my room and read it up." But this is no less true of every other large medical school, where students sit on the benches through the years and strain their eyes without ever really seeing anything. Fancy trying to see an appendix removed or the steps of a hysterectomy while 20 feet away!

Bevan is a clean-cut man in mind and body—one who has confidence in himself and whose surgical judgment is of a high order. I was present at 10 operations performed by him, five of these being for *appendicitis.* His procedure was very much that of Ochsner, except that he used catgut for the purse-string. I enjoyed very much a superb *dissection of the neck* in removing some tuberculous glands, the operator's every move showing the artistic anatomist. Three cases of *hydrocele* were each treated by the carbolic injection method. In a man with floating kidney he did a *nephrorrhaphy* according to the Tuffier plan. A straight lumbar incision; splitting fibrous capsule for 2 or 3 inches and stripping it back slightly; stitching this with catgut to the muscles; packing gauze down to kidney; closing ends of incision with silk-worm gut, gauze protruding from middle of wound. The kidney was not delivered outside of the body.

Henrotin.—I was permitted to see so little of Dr. Henrotin's work that it would be an injustice to him if I should even attempt to describe what I saw. Three operations only represent the sum total of my observation in his clinic at St. Joseph's Hospital. These were a gall-stone case, a vaginal hysterectomy for uterine fibroids and a resection of the sigmoid for cancer. The first case was one of the ordinary kind. My perhaps well known prejudice to vaginal operating, which I free-

ly admit, will not allow me to say that I appreciated the second case; it took one hour and 45 minutes, being very difficult and giving rise to considerable hemorrhage. I could not help constantly thinking that the case would have been easily finished in 20 minutes by the abdominal route, but this man is a vaginal operator! Ferdinand Henrotin, in common with the two who follow, is one of Chicago's medical men pursuing the strict paths of a gynecologist. He is a large man, of Belgian descent, and, while apparently indifferent or brusque in manner, has a most genial disposition. As an operator he is anything but brilliant; yet his technique is excellent, as it seems to be throughout the whole hospital. Henrotin's reputation in the city is of the highest and his work is drawn from the best classes.

Byford.—Through my acquaintance wth Dr. Henry T. Byford in the Southern Surgical and Gynecological Association for the past two years, I was the recipient of much kindness from him during my stay in Chicago. At this time he was getting ready for his vacation—in fact, was in and out of town continually, so that he was not doing his full quota of work. I was, however, invited to witness his private cases at the Woman's Hospital (an institution founded by his father, the late Dr. Wm. H. Byford) on three separate occasions. The first case was a curettage, amputation of the cervix, resection of both ovaries and intra-abdominal shortening of the round ligaments—all in the same patient. A rather nasty hysterectomy for a large, intraligamentous fibroid, was well handled. Dilatation and curettage, followed by Dudley's operation for anteflexion, was done on a woman whose os had been stretched once before without relief. On the last day he, too, performed a vaginal hysterectomy for a fibroid. First, he amputated the cervix and thought he could enucleate the pedunculated tumor without removing the uterus, as requested by the patient and her physician. But an interstitial growth was also found, necessitating the complete operation. Dr. Byford wished then, he said, that he had operated by the abdomen, anyway, and descanted freely upon surgeons allowing patients or the attending physicians to dictate the treatment. There is hardly an operator who has not at some time been hampered and prevented from doing his best by limitations thus placed upon him.

Findley.—As the sessions of the Rush Medical College continue during the summer, I was enabled to see the gynecological clinic in the Presbyterian Hospital, conducted by Dr. Palmer Findley. Professor Webster, head of the department, was, like Senn, out of the city for a vacation. Findley's course was elementary but no less enjoyable. His forte is his ability in diagnosis and he has written an excellent book on this subject; yet his operating was careful and thorough and the details all that could be desired. The actual number of operations I saw performed by him was small, but his clinical lectures on puerperal sepsis and gonorrhea in women were equally instructive and interesting. I was struck with his conservative views on the former and his graphic picture of the widespread consequences of the latter.

Southern Medicine, ably edited by Dr. William Edwards Fitch, of Savannah, Ga., has absorbed *Gaillard's Medical Journal,* formerly of Richmond, Va., but for some years published in New York.

NOTES OF TRAVEL.

Hospitals and Surgeons.—Observations and Comments.

By J. W. Long, M. D , Greensboro, N. C.

While it is said that "reading maketh a full man," and certainly there is no teacher like experience, yet there is perhaps nothing which broadens one's mind, enlargens the horizon of his conception, and gives him a truer insight into the science of his specialty, than does travel and seeing the work of other men.

For many years I have made it a rule to read every moment that I was not not actually engaged in my other work. I belong to five medical and surgical societies, and feel that I am remiss when I do not attend each meeting, principally that I may compare notes with and hear my brethren discuss their work. But nothing is so valuable to me as to stand by and see a surgeon of acknowledged ability in the actual performance of his work. I want to see him diagnose his case, watch his hand technic, the preparation of his patient, observe how he deals with complications, and a hundred other things that every well trained mind is alert to. To that end I improve every opportunity to see a good man work, and I always come away the wiser thereby.

I have often visited the northern and southern cities, and may be said to be fairly familiar with the work of the best men in them, but not until recently have I had the pleasure to visit the great northwest. A narration of what I saw in the way of surgeons and surgery is the purport of this paper.

Read by invitation before the Forsyth County Medical Society, November 15th, 1904.

CHICAGO.

It must be remembered that while in 1833 Chicago had only 70 inhabitants, it is now a great metropolis containing in round numbers 2,000,000 souls. There are said to be about 3000 physicians living there. The city directory gives about 70 hospitals, besides numerous "homes" and "retreats" for the sick. Therefore in view of my limited time, I must be pardoned if I saw only a small part of Chicago's hospitals and surgeons, but I feel that I saw enough to give me a pretty fair insight into Chicago ways, surgically. Certain it is, I came away from there with an exalted idea of her surgeons and their work.

The first hospital that I visited was Mercy Hospital, run by the Sisters of Mercy. This is the oldest hospital in Chicago, having been established in 1850 through the combined efforts of the late Dr. Nathan S. Davis and the Sisters of Mercy. It is a general hospital, contains 260 beds and is connected with the Northwestern University. The rates are about the same usually charged, and the income is said to be derived wholly from the patients, yet, in spite of a loss of $22,000 from patients who failed to pay up, the hospital collected last year $34,000 in excess of its expenses. This speaks well for the management, surely.

I went to this hospital especially to see my friend, Dr. J. B. Murphy, operate. I found him holding a clinic in the amphitheatre. The operating arena is well arranged, marble sides, treadle fixtures to the basins, good daylight, also electric light on a movable crane, etc. The operator and assistants wear gauze caps and covers over their mouth and most of the face.

Dr. Murphy's hand preparation consists in scrubbing with green soap and

hot running water, immersion in alcohol, and the use of his gutta percha solution. This is something new, and if it proves practical and efficient it will be a great boon to surgeons. The solution consists of benzine 4 per cent. containing sterilized gutta percha chips. It is poured on the hands and allowed to dry without rubbing. When applied in this way it makes an almost invisible coating, which Dr. Murphy claims is as protective to both patient and operator as are rubber gloves. Certainly it is less cumbersome. The solution is easily removed from the hands by washing in benzine. I noticed that Dr. Murphy's assistants wore rubber gloves.

Dr. Murphy was discussing with his class tuberculosis of the spine. He pointed out how spinal tuberculosis might simulate other affections, narrating a case that had been treated for gastric ulcer, and when the true condition was recognized, was cured by simply keeping the patient in bed. He dwelt with special emphasis on the importance of not opening tubercular abcesses for fear of getting a mixed infection. He treats a tubercular abscess by aspirating a part, only, of the pus, inserting the needle as high up as possible and injecting a solution of iodoform and formalin. This method is not new and is based on sound principles.

The first patient presented had congenital paralysis of the right deltoid, triceps, supraspinatus—in fact, that group of muscles controlled by the posterior cord of the brachial plexus. Dr. Murphy proposed to, and did at a subsequent clinic, transplant the inner cord to the posterior, thereby restoring muscular action. Dr. Murphy has also grafted the spinal accessory nerve into the facial.

Nerve transplantation is a fine art and reflects great credit on the operator.

Among the interesting cases exhibited were two patients with extensive burns which had been skin grafted, using the whole skin, or dermal grafts. Dr. Murphy pointed out that epidermal grafts would contract and would not stand pressure, as in the palms or soles; while dermal grafts tend to expand rather than contract and stand pressure well. This difference is the reason for mentioning these cases. A number of other cases not of special interest were exhibited.

A man with triple hernia, double inguinal and umbilical, was operated on, the operator dealing only with the left inguinal hernia, however. The interesting feature about this case was the enormous amount of fat contained in the hernial (left inguinal) mass. The fat was not inside the sack; indeed, the sack when opened was empty, but the fat enveloped the sack in thick layers; while hidden away in the mass of fat was found the urinary bladder. The presence of the bladder was demonstrated by opening it; it was then closed, freed from the fat and pushed back into the abdomen. The sack was then dealt with in the usual manner. Gauze drainage reaching to the bladder, and a rubber drain placed superficially were employed. A catheter was introduced into the bladder, through the urethra, of course, and fastened to remain ten days.

The presence of the urinary bladder in the hernial mass must be very rare. I met with a uterus and part of the fallopian tubes in the hernial sack of an infant three and a half months old.

Dr. Murphy impressed me as being an able, careful and conscientious operator. He has recently reported 2000 appendectomies, with 1400 interval

cases before he had a death and that one was due to an assistant, without his knowledge, having held an autopsy.

THE CHICAGO HOSPITAL.

This is a private hospital belonging to Dr. A. H. Ferguson. It is one of the best equipped and most modern hospitals that I saw in Chicago. It has about fifty beds. By virtue of my fellow membership with Dr. Ferguson in the Southern Surgical and Gynæcological Society, I found ready access to this institution.

Dr. Ferguson has devised a number of new instruments and operations, one of the latter being an improved method of doing the radical operation for inguinal hernia.

I found the doctor in the midst of a difficult abdominal hysterectomy for carcinoma of the uterus. The case had been abandoned by another surgeon of national fame. In doing the operation it became necessary to dissect out the lower end of the ureters for several inches. The operation was cleverly done, and reflected great credit on the operator. It was noticed that the patient's hips were greatly elevated and the head lowered nearly to the floor, securing thereby the full benefit of gravity in keeping the intestines out of the pelvis. Every one in the room was required to wear a gown.. The visitors' gowns were made without sleeves, which would of course make it more difficult for the visitor to touch something he ought not to in an unguarded moment.

DR. NICHOLAS SENN.

It was my earnest desire to see Dr. Nicholas Senn operate, and I called on him to ask for a date. He received me very cordially, told me something of his recent trip, in which he had traveled 30,000 miles, had gone through the dangers of India, where he worked in a temperature of 110 degrees in the shade and 132 in the sun, had reached America safely and well, only to catch a deep cold while stopping a few days in St. Louis on his way home. Because of this cold he was unable to operate until the following Monday, at which time he kindly invited me to be present. Before the day appointed Dr. Senn was called out of the city and I did not get to see this great surgeon operate, much to my disappointment.

COOK COUNTY HOSPITAL.

This is one of the most famous institutions in the country, and unless it be the great Charity Hospital in New Orleans, is probably the largest hospital in America. Large as it is, it is only one of the dapartments of the Cook county charity work, all of which is under the administration of the county commissioners. In other words, it is our old time "poor house" elaborated and perfected along truly charitable and scientific lines until it commands the attention and admiration of the world!

The present capacity of Cook County Hospital is 950, while the new buildings about completed will accommodate about 350 or 400 more. All classes of patients are received here and each and every one without charge. Nationality, race, color, nor "previous condition" make any difference in Cook County Hospital. I can testify whereof I saw.

In the matter of the staff the regular physician and the Homeopathies have equal show. The staff is large, some one said 125. There is talk of reducng the number.

CONTINUOUS RECTAL INFUSION.

One treatment being practiced in Cook County Hospital is well worth mentioning, and that is the continuous infusion of salt solution into the bowel for cases of general sepsis. The idea is to wash the blood of the infection, as is done in uræmic poisoning. The method is simple. A bottle filled with warm saline solution is connected by rubber tubing to a catheter, which is inserted into the rectum about a foot. It is claimed that about a pint of the solution will be absorbed each hour, incredible as it appears. The absorption is evidenced by the excessive flow of urine. The results of this treatment are said to be good.

THYROIDECTOMY.

I saw in this hospital Dr. C. J. Rowan do a perinæorrhapy and a thyroidectomy. I was especially interested in the latter, which was done under cocaine and morphine anæsthesia and very cleverly performed. The patient was a male in whom the occurrence of thyroid tumors is rare, certainly in the South. Dr. Rowan and his staff were very courteous to me.

DR. W. A. SCHRODER.

In the Hospital I met Dr. W. A. Schroder, who showed me every courtesy, asked me to make rounds with him, etc. There are four operating rooms in this hospital and Dr. Schroder uses two of them alternately, while the nurses are cleaning up one of them he is operating in the other.

In order to bring out some of Dr. Schroder's special methods and ideas, I will narrate a few, only, of the cases I saw in his clinic.

The first patient was a young physician who had had a very mild attack of pain and tenderness in the appendicular region. At this time the evidences of inflammation were very slight but Dr. Schroder thought distinctive. He advised removal, to which the patient readily assented. My impression was that it does not take much provocation to get an appendectomy in Chicago. But would not we all get better results if we would operate, as Dr. Schroder advised in this case, before serious trouble occurs?

The first case operated on was one of appendicitis. The patient had had two mild attacks. The gridiron incision was employed, and care taken to separate, by means of the fingers hooked into the wound, the various layers. There was nothing special about the removal of the appendix. The feature of the operation was the closing of the abdomen after Dr. Schroder's peculiar method. Only two sutures of silk worm gut were used, but they were so introduced as to bring the layers together separately and not en masse, as after the usual way. As the dressings were applied the operator told his assistants to let the patient sit up whenever she wanted to, whetheer it was in a week or two days.

There was a young physician present on whom Dr. Schroder had done an appendectomy eight days previously, who said he had staid in bed only three days. I thought he appeared a little lame on one side, but he was game and refused to lie down.

Dr. Schroder operates on every case of appendicitis as soon as called. He says "every case has an operable stage," but the best results are obtained when the operation is done within the first few hours. Dr. Schroder showed a beautiful case of dermal grafting, in

which he had transplanted the skin of the abdomen to the forearm. He cleans his pateints on the table, simply having them shaved before hand. He claims that by this method the results are just as good and less expensive. Another feature worth mentioning is that he begins the anæsthesia with nitrous oxide, and on the operating table. He, as does every other surgeon I saw operate in Chicago, uses ether.

TURK'S ANATOMY LABORATORY.

I visited Turk's Laboratory of Anatomy and Dog Experiment work, which is said to be one of the best equipped in the country, and saw some interesting demonstrations on the cadaver.

THE CHICAGO POST-GRADUATE HOSPITAL.

This hospital is said to have 115 beds and has a dispensary connected with it. There I saw Dr. Dermid do a perinæorrhapy somewhat after the Tait method and an Alexander operation. Dr. Dermid wore gloves and his technic was good.

In another operating room in the same hospital I saw Dr. Goldspoon operate. His hand technic consists of scrubbing with hot water and soap, and the use of a solution of lysol and bichloride and wearing rubber gloves. He cuts off the fore finger of his glove so that he may feel better.

The operation consisted in a uterine dilation, using first solid and then branched dilators, curettage, swabbing out the uterus with tincture of iodine, amputation of the cervix, opening the abdomen, removal of the left tube and ovary and suspension of the fundus by both cornua. The suture material was catgut. The abdomen was closed in tiers and mass sutures also used. Dr. Goldspoon made the very true observation that however operators may differ about the best method of closing the abdomen, all agreed in the absolute necessity of bringing the fascia snugly together.

Before the operation began the patient's respirations were disturbed and probably stopped. Suspantion of the patient with vigorous artificial respiration revived her. Under chloroform she did better than with ether.

MOPHINE-HYOSCINE ANAESTHESIA.

In the same hospital I saw Dr. Emil Ries do an appendectomy with only morphine and hyoscine given hypodermically for an anaesthetic. The patient stood the operation well, but made some complaint especially during the incision of skin. As the operator began closing the peritoneum, he ordered a few whiffs of chloroform. The morphine hyoscine mixture is given hypodermically, beginning about two hours before the operation, and repeated every half hour in doses of sulphate morphia gr. $\frac{1}{8}$ and of hydrobromate of hyoscine gr. 1/200. Ries claims that it is a success.

Dr. Ries informs me that this anaesthetic was first used by Kroff in Germany, and the alkaloid used with the morphine is hydrobromate of scopolamine, but not having the latter he is using the hyoscine which is isomeric

Another feature of the operation was Dr. Ries' practice of invaginating the stump of the appendix by first fastening a suture in the cut edges of the stump, then passing the needle through the stump into the caecum and out at an indifferent point. I divised and practiced this method nearly three years ago, but did not publish it, and as Dr. Ries did publish the method to him belongs the credit.

RUSH MEDICAL COLLEGE.

I attended an interesting clinic at this institution conducted by Dr. A. D. Bevan. It was noticed that his method of using gloves and gowns was ideal. After the ordinary washing he puts on a long sleeved gown, the cuff of the glove being pulled up over the ends of the sleeve.

Dr. Bevan's first operation was a gastrostomy for cancer of the oesophagus. He doubted whether the operation did much good, but some patients gained 20 or 25 pounds after the operation.

The next case was one of empyaema in a boy 3½ years old. The infection followed pneumonia and examination of aspirated pus showed pure culture of the pneumococcus, which offers the most favorable prognosis. Dr. Bevan said the rule was to resect a rib, but in children incision was usually sufficient. I have never found in a fairly large number of cases that it was necessary to resect a rib in either child or adult. Dr. Bevan was emphatic in saying the pleural cavity should never be washed out or all the pus evacuated at once. Even later he never washes out the pleura except in cases of faecal pleurisy, as where the pleura is infected from a ruptured appendix.

The next case exhibited was one in which the head of the humorus had been removed by means of a Gigli saw for tuberculosis. The incision was in front. A very pretty skiagraph of the condition before operating was shown. I cannot mention all the interesting cases shown by Prof. Bevan.

ST. MARY'S OF NAZARETH HOSPITAL.

Ten years ago this hospital was started in a small flat building with 24 beds. To-day they have a massive fire-proof structure, 196x87 ft., five stories high, made of cut stone and pressed brick, containing 240 beds. It is owned and run by the Sisters of the Holy Family of Nazareth.

AUGUSTANA HOSPITAL.

The Augustana Hospital, established in 1884, is the property of the Sweedish Lutheran Church. Its present capacity is 150. The addition just being completed will nearly double the number of beds. The building is made of stone and brick built in a steel frame, while the rooms and stories contain hollow tiling between them. The present operating room is rather cramped, but the new operating rooms are strictly up to date.

DR. A. J. OCHSNER.

I have mentioned the last two hospitals because I wish to speak of the work of Dr. J. A. Ochsner, who is Surgeon-in-Chief to these hospitals and in which I saw him do a large number of operations.

First, a word about Dr. Ochsner. He is a native of Wisconsin, perhaps 45 years old, is a vigorous, energetic, restless man, capable of doing a vast amount of work. I saw him do ten operations in one morning, 7 of them abdominal, 2 uterine and one a breast amputation, besides most of them were multiple operations. He is professor of clinical surgery in the College of Physicians and Surgeons. He does not talk much, but his words are clear-cut and to the point. His clinics are always crowded. I counted from 20 to 50 physicians there each morning. I met in his clinic physicians from all over

the northwest, Utah, SanFrancisco, Texas, Canada, India, etc. Dr. Ochsner, and his staff as well, treated me with great courtesy, explaining various operations, showing me many interesting cases, etc. I also had the pleasure of taking luncheon with him and meeting his charming family.

While Dr. Ochner works with celerity, one reason why he can do so much work is his well-trained assistants. His chief-of-staff, Dr. N. M. Percy, who recently has become a partner with Dr. Ochsner, has done over 700 operations himself. His present chief-of-staff is Dr. Yates, a Hopkins man.

Dr. Ochsner tells me he has operated on nearly 3,000 cases of appendicitis The chief point of interest, however, in his appendicular work is his peculiar method of treating fulminate cases of appendicitis. His method is simple, yet effective, since his mortality, in fulminate cases, is less than 4 per cent. He first washes out the stomach, then starves the patient absolutely, giving only water by mouth, sustaining the strength by nutrient enemas of Liq. peptonoids, oz. I., salt solution, oz. III., given every four hours, with a little deod. tr. opii if needed for pain. When adhesions form, he operates.

I saw Dr. Ochsner do five appendectomies in one morning, but as it chanced none were of the fulminate variety, though I saw a number of the latter in his wards.

I must confess that Dr. Ochsner's hand technic is seemingly not as thorough as that of some men, but he gets good results. I noticed, however, that he was careful to touch infectious wounds only with gloves on, though he does his abdominal operations without gloves.

The point appears to be that to keep the hands clean is better than cleaning them, for certainly a hurried scrubbing in running water and a dash of alcohol would hardly sterilize germ infected hands.

I learned a number of practical things from Dr. Ochsner, among them the following:

(1) In sewing, the suture is drawn through the needle to the middle and both ends caught by a single pair of forceps. This keeps the suture from tangling and makes it easier to tie, which is done with the forceps held in the left hand. Ligatures are always handed to the operator with forceps on the end.

(2) In closing a wound, the fat is never sutured, and the skin is approximated very loosely with the square or looped suture of horse hair.

(1) The dissection of adipose tissues is done by the dry gauze method. I saw Dr. Ochsner clean out the fat and glands of the axilla in a breast amputation and the very thick layers of fat in an umbillical hernia operation by this method with great ease; and in the former instance with much greater safety to the vessels.

(4) After seeing Dr. Ochsner do cholecystostomy a number of times for gastro-duodenal trouble, especially dilatation of the duodenum with ulcer in some instances, I became convinced that his claims for the advantages gained by draining the gall bladder in these cases are not exaggerated.

No less an authority than Keen says: "Gall bladder surgery is yet in its infancy," and I ween it will never get beyond its swaddling clothes while we postpone operating until the bladder is full of stones. Only five days ago I operated on a case in which the stones, fully grown, mature and faceted, becoming restless at the delay of the surgeon had ulcerated their way

through the side of the bladder into the common duct! To operate as does Ochsner while the bladder contains only thick, grumous bile or "gall stone sand" as he calls it is infinitely easier, safer and gives ideal results. I will mention only two other operations.

THE MAYO OPERATION FOR UMBILICAL HERNIA.

This operation was originated by the Mayo brothers of Rochester, Minn. As done by Ochsner it consists essentially of making a transverse oval incision around the hernial area, removal of the mass including the tissues around the umbilical opening, then tucking by means of sutures the one edge either the lower or upper of the fascia and peritoneum under the other edge to the extent say of two inches according to the amount of slack. After securely suturing the under layers as though there had never been an umbilical opening, and there is not one afterward. The remainder of the wound is closed after the usual manner.

THE MCGRAW OPERATION.

There has been a great deal in the medical journals recently about the McGraw method of doing gastro-enterostomy. In Ochsner's hands, and he gives full credit to its author, Dr. McGraw, who lives in Detroit, it is simplicity itself.

After locating the transverse colon, the jejunum as far from its proximal end as is practical is fastened to the anterior wall of the stomach with a running suture of silk. A solid rubber cord a little larger than a pencil is fastened to a trochar needle, which is plunged into the bowel near one end of the suture, out again near the other end, then into the stomach and out again opposite the point of entrance into the bowel, pulling the rubber after it. The rubber cord is then drawn very tightly, tied with silk and cut off. The running suture is then continued above and around the cord till the starting place is reached. The abdomen is closed. That is all there is of it. I saw Ochsner do this operation the 111th time. It is the ideal operation for malignant stenosis of the pylorus.

A Modern Method of Treating Morphine, Whiskey and Other Drug Addictions.*

By S. M. Crowell, M D., member the Sea-Board, Tri-State (Carolinas and Virginia) the N. C. and American Medical Association, etc. Assistant to the Professor of Nervous Diseases and Lecturer on Inebriety in the N. C. Medical College, Charlotte, N. C. Proprietor and Medical Director of the Crowell Sanatorium for Treatment of Whiskey, Drug and Nervous Diseases, Charlotte, N. C.

Morphinism is a disease induced by the abusive use of morphine. The greater part of this paper will be devoted to this one subject. The Greeks, in the time of Hippocrates, were acquainted with the use of opium. It is said by some that the drug sent to Helen from the wife of Thone, described in the fourth book of the "Odyssey" by Homer, was evidently opium. The Arabs later introduced a knowledge of its properties to India and China, but it was five hundred years from the time of Hippocrates till it was unfortunately found out that opium, like alcohol, would produce pleasurable sensations. Since that time, men have used it so indiscriminately as to bring on disease and death. But the advancement for the treatment of this class of patients has been sorely neglected.

*Read before the recent meeting at the North Carolina Medical Society at Raleigh, N. C.

Various hypotheses, without clinical verification, have been advanced. Some authors advance Gradual Reduction; others, Rapid Reduction; others, Sudden Withdrawal. Some evolutionists say by elimination of the unfit, and last and most savagely, some writers say it is useless to treat such a disease, the only alternative for the unfortunate victims being to lock them up and let them writhe out their miserable existence as best they may.

Away back in some remote age, some ignoramus asserted that all such unfortunates were liars and thieves who were beyond redemption by scientific skill. For a lack of clinical advantages, it is a sad fact that this primitive idea still predominates the minds of some of our present day writers. With due reverence to all, the writer thinks that this is a disease amenable to treatment with good results when the proper method of treatment is pursued, and to his mind the only rational method is the Sudden Withdrawal of the drug—the cause of the disease—just as you would, as rapidly as possible, eliminate the source of infection in any disease—as for example, in malaria. Under proper conditions, this course can be pursued without any danger to or undue discomfort on the part of the patient.

The aetiology is well understood and will be dimissed with a plea to the physicians to be more careful in its administration to patients, and will give a mild warning for their own benefit by citing them to the case of the well known English man of letters, De-Quincy.

The pathology is only functional, hence, more amenable to treatment than disease in which the pathological changes are of a structural nature. The entire system is impregnated with morphine and its by-products, and toxines generally, as a result of faulty metabolism and defective elimination. As a result, the functions of the body cells are benumbed and perverted, and when the drug is withdrawn *without* the proper preparation, this perversion of the functions is manifested in a way familiar to all who have witnessed the phenomena. This perversion is marked by fever, acute pains, nausea and vomiting, diarrhœa, dysentery, profuse sweats, etc. This is not due primarily to the withdrawal, but to the general toxemia and these symptoms have been kept obscure by the benumbing paralyzing effects of the opium.

These unpleasant symptoms can be wholly avoided by the proper treatment. This assertion, contradictory to the writings of eminent writers, might appear rather presumptious, but the statement has been verified by a careful study and clinical research by the writer. By the gradual reduction methods, it is impracticable to remove the pathological conditions until the patient is in such a condition that he has neither physical strength nor mental firmness to resist the slightest pain or temptation. In all the Gradual Reduction Methods, the patient is given medicine, or so-called "tonics," all the time he is in charge of the physician, presumably to take the place of the morphine, and is usually sent home with a sufficient amount to last for from one to three weeks. The result most reasonably to be expected too often occurs, i. e., the patient begins to "substitute" himself, and he is not altogether to blame, for the mind is so constituted that when it has been trained for so long a time to do a thing, that it clings tenaciously to that idea. The rational idea is to eliminate the effete material from the system as rapidly as possibel, and give medicines only as indicated. Teach the

patient while he is still under your observation how to live without drugs instead of encouraging his fixed dependence upon them. *By the Sudden Withdrawal Method,* there is an idea prevalent that there is danger of collapse, heart failure, etc. *This is not correct.* Should the heart derive any stimulus from the morphine, in this stage, the elimination of the effete material from the system, and stimulation of the various cells and glands of the body, and the consequent relief to portal, venous and lymphatic congestion would more than compensate for the stimulus derived from that drug.

The eliminative process is begun upon the patient's appearing for treatment, (and by this method you must have the patient confined to a well regulated hospital under the constant surveilance of a trusted nurse.) He should have a hot bath, also a simple diuretic. Beginning in the afternoon, give a brisk purgative. Ordinary purgatives will not answer in these cases, for the nerves are benumbed by the opiate, and the good results depend very materially upon the completeness of the elimination. The patient should not have any supper. The purgative employed by us consists of the following: R.—Hydrarg. chlorid mite; cascarine; Ext. Colocynth Co. AA, gr. X; Pul. Ipecac; Aloin, AA gr. II; Strychnine Nitratis, gr. $\frac{1}{4}$-$\frac{1}{2}$, M et ft. capcules No. IV. Sig. —One capsule at 4-6-8-10 p. m. Give his accustomed dose of morphine till bed-time, say 10 o'clock, when he takes the last capsule. From 5 to 8 hours after giving the last capsule give a hypodermic of nitrate of strychnine, say from gr. 1-40-gr. 1-20. This aids the heart's action, which is yet laboring against its burden, as well as to increase intestinal peristalsis. Also give some saline cathartic at this stage. If necessary to start up lower bowel action give an enema of warm water and repeat if necessary. Repeat the saline and enemeta until the elimination of the bowels and kidneys has been well started up. This action upon the organs of the alimentary and urinary tracts does not complete elimination, by any means, but the greatest obstacle has been overcome so that the stimulation of, and the consequent elimination by the secretory and excretory glands will soon complete itself.

The most of the other disagreeable symptoms that would arise by this or any other method are nervous and mental and of short duration. These, of course, could be allayed for an indefinite time by a dose of morphine, but upon the subsiding of its effects, the patient's pathological condition would be just about the same as when treatment was begun, as the morphine would dry up secretions and check the elimination. With properly selected drugs, the disagreeable nervous and mental phenomenæ, incidental to the completion of the elimination, can be avoided and the process of recovery not interfered with. The time required to administer these drugs varies from 24 to 48 hours after the process of elimination has been well started up. At the end of that time, the patient usually needs but little, if any other, medicine, and will remain comparatively comfortable and free from all craving for the original drugs, appetite and digestion good, will sleep sufficiently, and his stage of convalescence materially shortened compared with that by the various Gradual Reduction Methods.

Hyoscine Hydrobromate is an ideal drug to control the patient during the nervous and mental stage referred to above. It acts as a nerve sedative; produces comfort and thus prevents that

indescribable feeling incidental to withdrawal of morphine without the proper conditions, but has none of the bad after effects produced by opiates, and can be discontinued without any inconvenience to the patient.

The administration of the Hyoscine should be begun as soon as elimination has been well started up, or as soon thereafter as abstinence symptoms manifest themselves. The dose varies from gr. 1-300 to gr. 1-50 hypodermically, at periods varying from 50 minutes to 6 hours. At first give the smaller doses, and repeat until sleep is induced or the patient is easy and free from pain. As the dose in one patient is no rule to that in another, the physician must be present constantly during the administration of the Hyoscine so as to notice the effects and determine the succeeding doses. The Hyoscine, properly given, does not act injuriously nor have bad after-effects on either the body or the mind; therefore, it should be given until the full physiological effects are manifested, i. e., to the point of delusions and manifestations.

The patient should be kept thoroughly under its influence for a period of 24 hours; then its effects allowed to subside. If at the end of this time, the patient expresses a desire for morphine or if he is uncomfortable, a full dose of Hyoscine should be given and after its effects have subsided, it should be repeated, if necessary, until he manifests no more desire for the morphine.

If elimination has been thorough it will rarely, if ever, be necessary to continue Hyoscine over 24 to 36 hours. At the end of this time, the patient will remain free from all pain and nervousness, will sleep sufficiently, have no craving for morphine, and in a very short while an excellent appetite, with digestive organs in good shape. It is very rare that any other medicine is needed, and should not be given as a routine treatment. When given, after this stage, the medicine should be administered with a specific purpose, and the patient made to understand that it is no substitute for the morphine. Never dismiss the patient taking a "tonic." Hot baths, alternating with cold douches, should be given frequently, the kind and frequency depending upon the condition of the patient. They aid in elimination, keeping the skin in a healthy condition; producing sleep and thus exciting the various cells to normal activity.

The diet should be nutritious and easily assimilated. *Do not permit alcohol in any form during treatment,* and thoroughly impress the patient with the danger of using it *after* treatment, for it invites a return to the use of morphine. Teach the patient that he must live without artificial stimulation.

The time required for a restoration to health varies. One person may be more thoroughly cured and fortified against relapse in two or three weeks than another in so many months. This depends to a great extent upon how the disease was produced and how anxious the individual is to be cured. With proper warnings of the various sources of danger, and the proper mental suggestions, this class of patients can be very thoroughly fortified against relapse during his stage of convalescence.

Electricity, in its various forms, adds very materially to the patient's comfort and progress to restoration to health. With some variations, this method can be used just as successfully for the whiskey and other drug habits.

The Atlanta College of Physicians and Surgeons is to erect new college buildings at a cost of $100,000.

A Few Random Notes on Eye Cases.

By W. H. Wakefield, Charlotte, N. C.

Sometimes I think I am more than cranky on the subject of using mild agents in the treatment of the simple eye inflammations, but the results following this manner of treatment seems to justify the means used. Twenty years ago, while a student in a medical college, the stock prescription of yellow oxide of mercury was 1 gr. to 1 dr. vaseline, and it was given to all the milder cases of conjunctival inflammation. For blephantis marginalis and older conjunctival cases, the yellow oxide was used 2 grs. to the dr. vaseline. After practicing four years I paid the old school and hospital a visit, and I found they were using yellow oxide ¼ gr. to vaseline 1 dr.—just what I had been doing for three years—it having taken one year's experience to convince me that the agents were too concentrated.

A patient was sent to me, some ten years ago, by a very busy practitioner in an adjoining county. The eyes were watery, membrane congested and angry looking—practically no mucous or muco-pus. In his letter introducing the patient the doctor stated he had been treating the case a month or six weeks; was using zinc sulph. 5 grs. to the oz. of water; had began at one grain and worked up, the patient continuing to grow worse, if anything—certainly no better. I told the patient to stop the medicine he was using. I gave him Sodi Boratis, grs. 10; Sodi Chlorid, grs. 6; Aqua Rosæ, oz. 1, and told him to put 2 drops in each eye every hour for the first two days; then every 3 hours for a week; then 4 times daily. His doctor told me afterward when the patient handed him the prescription to fill that he "knew it would do him no good, but as his patient had paid $5 for it he filled it; but, he added, "it did the work and taught me a lesson."

A few months ago I saw a most excellent doctor write as follows for a very small phlyctenular ulcer on the mucus membrane of a colored child's eye. The congestion was very mild, the child complaining only of the light, yet was able to keep the eye open:

R.—Hg. Ox. flav., grs. 8
Vaseline, oz. 1

M. Sig Put same in eye 3 times each day.

Suffice to say, the eye grew worse, and in a week was sent to me. The eye was now markedly congested. The whole trouble yielded like magic to

R.—Hg. Ox. flav. gr. 1-3; Adrenalin Sol. gtts. 4; Lanoline, grs. 8; Atropine Sulph. grs. ¼; Vaseline, dr. 1.

A little of this was put in the eye night and morning. The atropine suspended the action of the ciliary muscle, thus putting the eye at rest; the adrenalin reduced congestion of the superficial and deep vessels, while the yellow oxide was in sufficient quantity to produce the needed antiseptic action to enable the ulcer to heal, but not sufficient of it was present to over-stimulate, or, in other words, to irritate the parts.

An interesting case was seen by me at the Presbyterian Hospital about November 1. A man of 40 was stricken with paralysis of his right side 18 months ago. He had regained the use of his right leg to nearly normal, but his right arm is of but little service. Four years ago sight in right eye began to grow dim; the eye has been blind for six months. Inspection showed a mature cataract. Vision in left eye is much reduced On examination with ophthalmoscope shows optic atrophy. The right eye can appreciate the light from a lamp in a darkened room and

enables him to locate the windows. The question was: Is it worth while to operate? for if the right nerve is in the condition of the left, the result will be nil. It was decided to give the poor man the benefit of the doubt, since his perception of light through the cataract was normal. The cataract was removed and the patient has good vision. It is yet too early to say exactly what percentage of normal sight he will have, but it will be good.

203 N. Tryon.

The Successful Treatment of Severe Bleeding.

By James R. Adam, M. D., Detroit, Mich.

A patient of mine, quite well advanced in years, experienced a severe hemorrhage after the extraction of a tooth. When I was called to the case I found that he had been bleeding for many hours and had lost considerable blood. After endeavoring to check the hemorrhages with styptics and failing, I inserted cotton batting, saturated with a 1-1000 Adrenalin Chloride Solution, into the cavity, whereupon the bleeding ceased at once and there was no recurrence. From information given me by the patient I am inclined to believe that he is a bleeder.

I have also successfully employed Adrenalin Chloride Solution to check the severe hemorrhage that usually occurs after tonsillotomy. In a case of metrorrhagia prompt relief was obtained by injections and tamponing with a 1-2000 solution of Adrenalin Chloride, employed simultaneously.

The last case in which I had occasion to use Adrenalin Chloride Solution was peculiar. It was that of a woman, eighty-eight years of age, who had been in the habit of using snuff all her life. In consequence, the nasal mucous membrane had become atrophied, until the blood vessels were exposed and severe epistaxis resulted. When I was called I found her bodice literally drenched with the sanguine fluid. Persulphate of iron was applied without benefit. I followed this with an injection of Adernalin Chloride Solution, 1-1000, and then tamponed the nasal cavities with cotton batting, saturated in the same solution. The effect was almost magical, the hemorrhage stopping at once.

ABSTRACTS.

Why is Consumption so Prevalent and Seemingly so Fatal?

Dr. Paul Paquin of Asheville, N. C., before the Ohio Valley Medical Society, in a paper entitled "Consumption and its Borderland," shows from what seem reliable data that pulmonary tuberculosis is a very readily curable disease in many instances and argues that the profession is largely responsible for the ravages. Among other remarks he presents the following:

"Tuberculosis is still the most widely scattered, the most prevalent, and the *one* perpetual plague universally. It still consigns to the tomb more people than the slaughter of war in all its atrocious forms. The death roll of all the wars of the nineteenth century is estimated at 14,000,000[1] and that of consumption in the same period and countries at 30,000,000.

"Our country's yearly date rate by it is approximated at 160,000. Of these invalids perhaps one-fifth are not wage earners and have incomes continuing while sick. The remaining four-fifths

1Richet.

lose their precious daily revenue. If we estimate that all of the latter are too ill to earn anything for one year, and that each of them was previously earning one dollar a day three hundred days a year, what does it represent in yearly loss? $38,400,000! If the average length of invalidism is two years it means a loss of $76,800,000. These are flat losses of income.

"Why is the world so strangely apathetic with regard to this, the very gravest and most comprehensively destructive of all the ills of mankind? First, because the majority of the medical profession continues to consider tuberculosis, particularly pulmonary consumption, as incurable in any event. Second, because this circumstance and the lack of instruction in sanitary science in our system of education has produced a public mental attitude of wanton optimism. Third, because there remain here and there a few who reject facts of infection mathematically demonstrated the world over and continue a public crusade in favor of their mistaken ideas. Fourth, because when tuberculosis is recognized the truth is often concealed so long from the patient and relatives that the former loses precious chances of recovery and is allowed to disseminate the disease broadcast. Fifth, because, by the marriage of consumptives, prolific new centres of infection with far-reaching, fatal influences, reinforce the popular idea of unavoidable pathogenic perpetuity. Sixth, because the diagnosis of the disease, in the great majority of cases, is made too late for any measure of prevention or cure to be effective."

Yet, according to Dr. Paquin, tuberculosis is proven largely curable by the experience of specialists, general practioners and experimentalists. How are we to remedy the situation, cure more cases and finally stamp out the disease? On this question he suggests a more complete medical education so that early diagnosis may be possible.

"The medical college that will establish a competent chair to teach the pathology and clinical factors of the borderland of disease will confer a blessing on the profession and humanity, for it will do immediate good and soon be emulated. This sphere of medical science, including physiologic conditions as they taper down and change to pathologic states, and which have been explored only by few, contains the very germ of knowledge for the early diagnosis of all diseases affecting the constitution and could be treated in a most interesting manner without in any way interfering, but rather supporting or supplementing, the regular course on the principles and practice of medicine. A dozen or two of good, practical lectures would be of immense advantage to students and physicians alike."

The author argues that tuberculosis, after all, a disease of nutrition due to a faulty nervous system which permits directly and indirectly the introduction and development of germs and their toxins in the system and claims that, under a complete and proper control and guidance of all the organs in the system, consumption could not occur.

Dr. Paquin, following other writers and practitioners, believes that the tonsils and other tissues of the neighborhood constitute the chief gateway of tubercle bacilli, and mentions tonsilitis, habitual nose bleed, chronic hacking coughs, pleurisies, deficient nutrition and dyspepsia, etc., as early symptoms of consumption in the borderland.

Dr. Paquin lays great stress on the necessity of diagnosing the borderland of tuberculosis in order to arrest the malady in its incipiency, on the useful-

ness of open air life in a suitable climate, the value of certain remedies in the line of natural law, as certain vaccines and serums when applicable and in select suitable cases, and deprecates the pitiful habit of sending consumptives away moribund, often without any prior arrangement with a physician where they are sent to care for them, save them from errors of conduct and treatment in a new climate and the pitfalls incident to new, strange surroundings.

Poisoning by Wood Alcohol.

Drs. Frank Buller of Montreal and C. A. Wood of Chicago have written (*Journal of American Medical Association*, Oct. 8, 15, 22, 29, 1904) in detail of the evil effects of the use of methyl alcohol, "deodorized" wood alcohol or Columbian spirits as a beverage or in the use of stimulants such as bay rum, Jamaica ginger, lemon extract, and many others adulterated with this spirit.

They publish (*Journal Am. Med-Asso.*, Oct. 29, 1904) tables of fifty-four cases of death and blindness caused by the use of methylated spirits, collected from various sources, up to June 1904. In New York city in one day since that date there is a report of twenty-five deaths from the use of whiskey adulterated with wood alcohol.

They note, in nearly all the cases collected, derangement of vision, from a slight dimness to total blindness, coming on sometimes gradually, occasionally suddenly, and remaining from a few hours to a permanent condition.

The characteristic symptoms given by them of the toxic effects of wood alcohol are headache, giddiness, vomiting, swelling, dilation of pupils, delirium, labored respiration, weak pulse, cyanosis, unconsciousness, severe gastric and gastro-intestinal pains. These are not of course all present in every case, but are the most prominent symptoms observed.

That the evil is a growing one is shown by the later reports of the cases being more numerous of late years, nearly half of the reported cases having been observed between June, 1901, and June, 1904. The first authentic case was reported in 1879; another in 1888, then in 1897 was the third observation reported; 1898 gave only one report. Since then there has been a gradual increase in the number each year, except for 1903, when there was a slight decrease.

It is doubtful as to whether the different States can control the sale of wood alcohol, or the adulteration of food products with it—certainly not, except by concert of action in enacting statutes in regard to it, a measure hardly feasible; and it needs drastic measures on the part of the national government to prevent further sacrifice of life by this poison.

The authors above mentioned conclude their paper with these observations:

"The following tables, prepared by Dr. Buller, are practically complete to June, 1904. As previously stated, they furnish characteristic accounts of intoxication from various methylated drinks, as well as from inhalation of the vapor of methyl alcohol. That only two of these cases occurred in Europe points the moral so often urged in these papers; wherever a government permits the sale of "deodorized" wood alcohol (as in the case of Columbian spirits in the United States and standard wood spirits in Canada), the only effective safeguard against the ingestion of the poison is removed and the annual sacrifice to death and blindness will cer-

tainly continue. Either the manufacture and sale of "deodorized" wood spirit should be absolutely prohibited, or, as in Germany and Great Britain, an untaxed ethyl alcohol, rendered undrinkable by the addition of pyroligneous spirit, mineral oil, naphthalin or some other nauseous compound, should be employed in the arts in the place of Columbian spirits and other forms of "deodorized" wood alcohol in the adulteration of Jamaica ginger, lemon extract, bay rum, essence of lemon, whiskey, witch hazel, cologne water, and innumerable other alcoholic mixtures now employed in the preparation of food and drink.

"That this menace to the health of the community is an ever-present reality is evidenced by the recent death in New York within two days of seventeen persons from drinking whiskey adulterated with wood alcohol. Commenting on this tragedy, Dr. W. H. Wiley, chief of the Government Bureau of Chemistry, expressed the opinion that '85 per cent. of the whiskey sold in this country, in hotel restaurants, clubs and bars, is nothing less than a cheap imitation—an adulterated article distinctly injurious to the health.' "

Gonorrhoea.

Valentine and Townsend write of the relations of the general practitioner in the treatment of gonorrhœa (*Journ. Am. Med. Asso.*, Oct. 29, 1904). Two points are specially dwelt upon, viz.: that it is both a privilege and a duty for the family physician to treat gonorrhœa, and the method should be by irrigation. They prefer the permanganate of potash in varied strengths—1-5000 to 1-2000. The physician should administer the irrigation personally, at least once in 24 hours; twice in the same time would be better. Its administration should not require more than fifteen minutes. They reach the following conclusions:

1. Every general practitioner is perfectly competent to treat successfully uncomplicated anterior gonorrhea, if he will devote as much attention to this as he does to any one other disease.

2. Every patient with gonorrhea is entitled to the services of the family physician, just as much as if he had acquired any other disease in consequence of drunkenness or other violation of ethics of morals.

3. The general practitioner who declines to treat uncomplicated acute anterior gonorrhea avoids one of his most sacred duties to the profession and to humanity.

4. The patient who, because of his gonorrhea, is refused the services of his physician, is likely to become an opponent to scientific medicine, to the detriment of his health, that of his family and of the community.

5. The scientific treatment of at least acute anterior uncomplicated gonorrhea, is perfectly within the power of the general practitioner.

6. The irrigation treatment of gonorrhea is, as yet, the most effective method and most in accord with the modern scientific understanding of the disease.

Nitroglycerine for Erysipelas.

J. W. Wherry says (*Journ. Am. Med. Asso.*, Nov. 5, 1904) many drugs are used in erysipelas and but few if any have proved effective. Doubtful if any good results can be obtained from local applications. All physicians use them, but with a suspicion that the patient would have done as well without them. Applications to soften the skin and relieve the tension will add to the patient's comfort.

Four patients were treated with nitro-glycerine (histories given), 1-100 gr. every 3 or 4 hours, with excellent results. Local applications of icthyol and oxide zinc ointment were used and bowels moved with calomel. The author reaches the following conclusions:

"I ascribe no virtue to the ichthyol and zinc oxide ointment used locally except its soothing effect on the skin, and in one instance it did not even produce this effect, for the patient would rub it off as fast as it was put on. All these cases presented several features in common as the result of this internal treatment, viz., a reduction of temperature, moist skin, good appetite, steady pulse after the first day, absence of prostration, general feeling of comfort and a fairly rapid disappearance of the inflammatory process.

"In view of the above facts I believe I am safe in concluding, either that nitroglycerine is a *sine qua non* in erysipelas or that I had a marvelous and phenomenal run of good luck. To be sure, four cases are insufficient to establish a positive conclusion, but as the results were so uniform in every case where nitroglycerin was used I feel that I can conscientiously recommend it to the profession without further comment."

Unskilled Midwifery.

The conviction is forced upon one that the special mission of the gynecologist is to correct the mistakes of the obstetrician, says Dr. John C. Murphy (*Am. Journ. Surg. and Gyne.*, Oct. 1904) in a paper, "Pathological Conditions of the Female Genitalia Resulting from Unskilled Midwifery." The young doctor is trained in theory but not in practical midwifery. The average doctor eliminates obstetrics from his practice as soon as he is able, leaving the work to midwives and incompetents. Lacerations are repaired with a few stitches through the mucous membrane, with no coaptation of the parts, resulting in prolapsus, subinvolution, and chronic inflammation of the uterus; maybe pelvic cellutitis, pelvic abscess and general sepsis. Delay in using forceps may bring about pressure necrosis, resulting in vesico-vaginal and recto-vaginal fistula. Displacements result from lax management of obstetrical cases. Failure to secure firm contraction after delivery leaves the womb large and heavy. Improperly applied pads and bandages cause many cases of ventro-displacement. The hand in the vagina, retained clots and fragments of placenta, the dirty douche bag, and unclean attendants cause chronic metritis and endometritis, maybe followed by tubal and ovarian disease, peritonitis and whatnot. Carcinoma of uterus occasionally may be prevented by repairing a lacerated cervix.

If we could eliminate Neisser's coccus and obstetrical mistakes form gynecology, the remainder of the subject would occupy a small space. But unfortunately as long as human nature remains more human than divine, Neisser's discovery will continue to do a large business. But much can be done to minimize the troubles of women by elevating the obstetric branch of medicine and giving it the prominence and practical study its importance merits. Teach the student obstetrics at the bedside in addition to the theory; impress upon him that there is as much credit and glory in conducting a woman safely through child-birth and leaving her in a normal condition as there is in exercising the Gasserian ganglion or cutting out a stomach; make him understand that the man who can prevent a pathological condition

from occurring is greater than the one who cures it. The obstetrician must remember that he is called in most cases to attend women who are in good general health, and his business is to give scientific and natural process, if necessary. If he is practising his art as an artist should, his work will be complete when he leaves it. But if he belongs to the great army of the unwashed who don't know and won't learn, some other and better man has to come along and repair his mistakes or bury them. Many a suffering woman is left the victim of a doctor with a sweet smile and a winning way—but no brains.

Popular Objections to Vaccination.

FISHER (*Journ. Med. and Science-Medical Rec.*) says at no time has vaccination been in such disfavor as at present. The factions for and against it view it from different standpoints and the man of science is apt to be too dogmatic in asserting its untility. We no longer have the widespread epidemics of former times (thanks to vaccination) and the pock marked faces do not appear to the public as of yore, and an apathy resulted. Legislation was demanded by sanitarians and resisted because it was claimed that it did not protect, losing sight of the fact that it was want of thoroughness in its application that rendered outbreaks of smallpox possible. A smattering of a knowledge of bacteriology made the public fearful of germs and the reported occurrence of an occasional tetanus but intensified the objections. A septic virus is good but aseptic after treatment has been neglected, to the detriment of its position before the public. The weight of evidence is overwhelmingly in favor of vaccination, but some are too poorly informed to see it. It does no good to call these fools or ignoramuses, but they should be enlightened. Here is another stumbling block in the warring factions in our own ranks, as to the best virus, and the mode of administering it, and as to what constitutes a successful take, with many physicians denouncing it *in toto*. Before the law these doctors have the same standing as the most accomplished and learned of the profession. Compulsory vaccination has accomplished wonders, as in Germany, for instance, but the American people resent anything that threatens individual liberty, and a law cannot be enforced without the backing of public opinion. The difficulties of the situation can be pointed out, but it is another matter to suggest a remedy that will unite all interests and meet the indications. Perhaps a national board, to have full authority to decide all questions and control, test and regulate the sale of biological products, might do it.

Precocious Menstruation.—FORD, M. J., of Omaha, reports in *Journ. Am. Med. Asso.*, Oct. 29th, 1904, the case of a child menstruating at six months old. The mother says the child was ill and fretful from time of birth until flow was established but has been perfectly healthy since then, with no prodroma of menstruation and very regular every twenty-eight days, lasting three or four days, requiring two napkins a day each time. No indications of masturbation. Examination and report made when child was nearly sixteen months old. Legs, hips and breasts better developed than children of her age. Mons veneris covered with long silky hair. She opposes exposure and is decidedly modest. So far as known this is the earliest menstruation reported.

Mental State of the Puerperal.

Pregnancy is a pathological state rather than phsioligic, says Harriet C. B Alexander in a paper—Forensic relation of the puerperal mental state, (*Medicine,* November, 1904). It has not received the attention of lawyer and physician that it should. Labor which terminates pregnancy is characterized by pathologic conditions , and pregnancy is rarely if ever devoid of nervous conditions. Lower animals show nervous disturbances, even to the eating of their offspring. The alleged normal pregnancy and delivery among primitive races, do not stand the test of examination. Many of the primitive races consider a pregnant woman as under a spell or an evil spirit. Factors making labor and pregnancy more and more pathologic are (possibly?) the change in posture to an upright position; increased cephalic development without corresponding increase in pelvic development; mixture of a superior (cephalic development) race—with an inferior (small pelvis) race; atrocious methods of clothing, feeding, housing, training, employing the female—while the male has developed the cephalic measurement.

For centuries the pregnant woman has been considered irresponsible for her "longings."

Motive rather than the act itself constitutes the crime, and the mental state at the time must be considered. Responsibility is impaired where free determination of the will is interferred with. There is always a more or less perturbed mental condition in pregnancy, these, from very slight to puerperal insanity.

Where crime is committed in the puerperal condition the burden of proof should be on the state.

Diphtheria.

McMahan in a paper on the uncertainties of diagnosis and necessity of vigorous treatment of diphtheria (*Can. Prac. and Rev.*) claims that the death rate from this disease is too high, even with the use of antitoxin, which he considers a specific when intelligently used. For many deaths the physician is not responsible, for he is not called until too late, but many he fails to diagnose, or treat vigorously. Failures come from (1) failure to examine throat; "Always examine the throat of a sick child, no matter what the symptoms are;" (2) the case may be considered tonsilitis or cold or so mild that the old-fashioned remedies will do; (3) fails to follow up a suspicious case until too late; (4) treats the sick child and fails to protect the others with antitoxin; (5) fails to use accessory remedies in laryngeal diphtheria; (7) puts off the use of antitoxin until next day.

Many cases show diphtheria clinically, but no bacillus microscopically. When in doubt use antitoxin while waiting for the bilogic report. Antitoxin is beneficial to simple tonsilitis. Antitoxin should be used in pseudo-diphtheria. No harm is done to use antitoxin in inflammatory croup if in doubt as to diagnosis. All irritating nasal discharges should excite suspicions of diphtheria. Even if they do not have a sore throat they may be diphtheritic and inflict others. Large doses of antitoxin are required in laryngeal diphtheria. Enlarged tonsils, adenoids and nasal involvement also require doses. As accessories, use fume calomel under a tent—30 grs. an hour—until stenosis is relieved, and intubate early if symptoms demand. In extra malignant cases—involvment of the lungs, moribund condition when

first seen—marked toxic symptoms intravenous injections of 20,000 to 30,000 units has often saved life.

Treatment of Syphilis.

Delker claims that physicians are overconfident in the use of mercury in syphilis and the temporary disappearance of symptoms, instills a false security in the patient. In a contribution to the Therapeutics of Syphilis (*Therept. Rev., Sept.,* 1904) he gives a resume of a treatment used for twenty years and in nearly a thousand cases with good results, and no disagreeable complications from the prolonged use of the mercury. This is varied to suit the individual cases. The initial dose is one pill after meals and at bed time, increased each week until three or four pills are taken at a dose. The following is the prescription:

R

Hydrageri poto-iodii gr. ¼
Pulv. Opii gr. 1-6
Resin Guive gr. ½
Quinin Sul. gr. ½
Ex. Taraxaeum gr. ½
Ex. Belladonna gr. ½
Ex. Clover Tops (trip. pratense) .gr. ½
Ex. Stillinga gr. ½
Ex. Xanthoxalum.. gr. ⅛
Ex. Lappae gr. ½
Ex. Phytolaxcal gr. ½
Iridis-rad gr. ¼

M ft. pl. ÷ i.

These pills must be freshly made. The claim is made for the combination that it meets all the requirement for a prolonged use of the mercury, but that an intermittent treatment of syphilis is advisable, and the following prescription is used in tablespoonful cases, three times daily:

R

Fluid Ex. Sarsaparilla Zss
Fluid Ex. Lappae Zss
Fluid Ex. Stillinga m x v
Fluid Ex. Xanthoxplum m x v
Fluid Ex. Phytolaceal-Rad. m i
Potass Iodide gr. x v
Glycerine Z i
Aqui Dist. Zss
Syr. Simplex-g.s. Zss

M.

This can also be combined with 1-12 gr. biniodude of mercury if pills are objectionable.

Cancer of the Pancreas and Glycosuria.

There is a reprint in the *Albany Medical Annals* of an article published in the *American Journal of the Medical Sciences,* the same being a histological study of the changes in the Islands of Langerhans by Pearce, who reaches the following conclusions:

We have a definite basis for ascribing a certain portion of the cases of diabetes lesions of the pacreas and ultimately lesions of the island of Langerhans. As a result of the study here briefly outlined we can, I believe, include the permanent diabete of cancer of the pancreas in this group. Further observations must be made before the intermittent glycosuria can be attributed to destruction of large numbers of islands. The absence of diabetes in cases of extensive involvement of the pancreas would appear to be due to the survival of small fragments of the pancreas including a sufficient number of islands to carry on their peculiar function. The persistence of the islands under the adverse conditions described supports the observation heretofore made concerning their anatomatical independence, while their enlargement, suggesting as it does a compensatory hypertrophy, is corroborative of the theory that they have an independent special function.

A Description of Prof. Kocher's Clinic at Berne.

Vander Veer writes a description of Prof. Kocher's clinic and gives Prof. Kocher's rules for general narcosis:

1. The patient should not have food before anesthesia. The abdomen, both stomach and intestines, must be empty. Many give the patient one-half hour before anesthesia, especially to alcoholics, a cup of tea with a little brandy therein. In emergencies empty the stomach by the stomach tube. See that the rectum and bladder are empty.

2. Breathing must be unrestricted. Hence remove false teeth, loosen constricting clothing and place head and chest in a comfortable position. Always direct the patient to breathe deeply and naturally. *During* narcosis, to prevent the tongue falling back into the pharynx, place head on one side (preferably the left) and push the inferior maxilla forward.

3. To avoid anemia of the brain, raise the lower part of the body and the legs to a higher level than the head, and thus encourage venous return to the heart.

4. Begin narcosis in grown people with ethyl-bromide, then follow with ether.

5. Pour 15-30 grammes of ethyl-bromide on a face mask and, without loss of time, place the mask over patient's mouth and nose. Direct patient to breathe deeply. *Do not entirely exclude air!*

6. As soon as the patient becomes peaceful (within one minute) pour 20-30 grammes of ether on the ether mask and adjust this to the face without interruption, at the same time laying aside the ethyl-bromide mask.

7. Add ten grammes of ether, in the beginning at frequent intervals, until absolute unconsciousness occurs. From this time on small quantities of ether frequently poured on the mask, and intermingled with air, will suffice.

8. Rattling in the throat, or difficult breathing, indicates that the patient has received too much ether, or that the intermixture of air has been interferred with.

The Different Systems of Medical Practice.

Christian science is suggestion plus absurdity; divine healing, suggestion, plus faith in God; Dowieism, suggestion plus prayer and holy horror; Weltmerism, suggestion,plus imagination, pure; Magnetic healing, suggestion, plus imagination, also; Osteopathy, suggestion, plus massage; homeopathy, suggestion, plus nothing; allopathy, suggestion, plus tubs full of drugs, that either kill or cure; regular or rational medicine, suggestion, plus the best common horse sense available, or suggestion and medicine mixed with the best quality of brains obtainable.—*Abrahams in Spancheris Neurasthenic.*

The Differential Leucocyte Count as an Aid to the Diagnosis of Fevers.

Krauss in an elaborate article (*Journ. Am. Med. Asso.*) on the differential leucocyte count in fevers comes to the following conclusions:

1. It is not so much the absolute increased per cent. of large lymphocytes which is diagnostic of malarial infection as the relative increase over the small lymphocytes.

2. In cases of malarial infection without much fever and without quinin history, the polynuclears are markedly diminished and the large lymphocytes very much increased in proportion.

3. In the absence of an adenopathy, possibly also of influenza and measles, the above finding is positive evidence

of present or very recent malarial infection.

4. During the rise of a malarial fever, or as a result of quinin therapy, the polynuclear leucocytes may reach 80 per cent., but in that event the large lymphocytes exceed in number the small ones.

5. In malarial hemoglobinuria any of the various blood findings characteristic of malarial fever may be present in any stage, and there is no evidence now at hand to explain this.

5. Malarial and typhoid fevers can be more positively differentiated from fevers of sepsis, pneumonia, rheumatism, malignant tumors, etc., by the differential leucocytes count than by the hemocytometer, and it can be done on dried films, away from the bedside.

7. Malarial infection makes a strong impress on the leucocytic relation, no matter with what other disease it is associated.

8. It is not safe to rule out typhoid fever when the malarial variation is found, but, as it calls for anti-malarial medication, the therapeutic test may decide before a Widal reaction would appear.

9. In a gradually developing fever, the absence of marked increase in large lymphocytes of polynuclears during the first week justifies a preliminary diagnosis of typhoid fever.

The Pathology and Etiology of Arthritis Deformans.

(*Journ. A. M. A.*)

McCrae states that through bacteriologic work we have been able to limit certain forms of arthritis definitely. It would seem best to restrict the term "infective arthritis" to those forms in which the we have a distinct causal agent proved. The forms associated with the tubercle bacillus, gonococcus, pneumococcus, etc., belong to this group. Recent work suggests that acute articular rheumatism will before long be added to these. In regard to arthritis deformans, the evidence is as yet not positive, but very suggestive. Almost every point that one can raise in regard to this disease is a disputed one. The more important ones are as follows: 1. Have we under this term one disease with many different manifestations, or have we included two, perhaps more, totally distinct diseases? 2. The question of the relationship of arthritis deformans to acute rheumatism. 3. The question as to the essential etiologic factor, which are discussed under three heads: (a) a neural cause; (b) infection, with a definite specific organism; (c) infection, with various organisms.

The conclusions which may be made are as follows:

1. That there are two great types of cases, the atrophic and hypertrophic, which are probably varying manifestations of the same disease.

2. That there are many variations, such as the spinal forms, the so-ccalled monarticular form, the form occurring in children, etc., which are probably all arthritis deformans.

3. That the etiologic factor is not determined, but our present knowledge points to its being an infection of some nature.

4. That no opportunity of pathologic and bacteriological examination should be neglected.

Rupture of Mesenteric Glands During Typhoid Fever.

(*Journal A. M. A.*)

LeCoute states that while the profession has long recognized that among the various lesions which may produce peritonitis in the course of typhoid fever, rupture of the mesenteric glands

is one, and yet he was able to find only two recorded cases and several cases where rupture of the mesenteric glands had been suggested in obscure cases of peritonitis. The case reported was operated on for perforation of the gut, when the cause of the collapse was found to be a ruptured mesenteric gland. The patient made an uneventful recovery. He reaches the following conclusions:

1. Swelling of the mesenteric glands is a constant lesion of typhoid fever.

2. That such enlargement is due principally to a proliferation of the endothelial cells lining the lymph sinuses.

3. That these cells by penetrating the walls of the capillaries and smaller veins produce thrombosis, with resulting minute necroses.

4. That such necrosis ends in resolution.

5. That perforation of the capsule of the gland is dependent on some cases other than the presence of the typhoid bacillus and thrombosis of the smaller glandular vessels.

6. That perforation is probably due either to the presence of the staphylococcus or streptococcus in the gland, or to thrombosis of larger vessels of the mesentery outside of the gland.

The Pathogenesis of Uremia and Eclampsia.

(Journal A. M. A.)

Wilson states that none of the theories offered up to the present time has been thoroughly satisfactory in explaining either the uremic state, which seems to be associated always with renal insufficiency, or that of eclampsia, which may or may not be preceded by signs of renal disability, but presents an almost identical clinical picture. He reports three cases that were treated by lumbar puncture on the theory of increased incranial pressure and draws the following conclusions:

1. That it is probable there are at work in the cerebrum, as well as throughout the system of uremic subjects, at least one, and probably several toxic substances which exert their influence more or less locally on the cortex

2. That it is equally certain that other portions of the brain than the cortex are also acted on, as in the production of coma, etc.

3. That no small part in the production of the uremic and eclamptic condition is played by intracranial pressure, due to a temporary excess of fluid, whether acting independently of or in conjunction with the toxic substances already mentioned.

4. That lumbar puncture will at least temporarily relieve certain of the symptoms most readily ascribed to localized intracranial pressure, and that in cases in which the pressure is the main factor, drainage of the spinal canal may save life. The procedure, together with free bleeding, purging and diuresis, should be added to our routine treatment of the condition.

5. That transfusion of normal salt solution by intravenous injection or hypodermoclysis, except in cases presenting anuria, or a greatly diminished urinary secretion, is contraindicated as tending to increase the liability to saturation of the tissues.

6. That the results of lumbar puncture in the three cases cited in this paper will not warrant the assumption that relief of intraspinal or intracranial pressure can alone be depended on to cure the uremic or eclamptic condition, provided the toxic influence is the prominent one in the particular case.

Acetone in Typhoid Fever.

Oulman comments on the difference in treating typhoid fever in a hospital with well regulated appointments and hygienic surroundings, and the average home of indifferent nursing and objectionable surroundings. He reports (*Medicine,* October, 1904) fourteen consecutive cases treated with acetone in private practice. All were undoubted typhoid fever, and none in the higher walks of society. The ages ran from seven to thirty-four years, average duration of treatment sixteen days, the longest being twenty-three days. Prompt amelioration of symptoms followed the administration of the acetone, and all made complete recoveries. The doses ranged from two to four grains, given 3 to 6 hours apart, according to age and symptoms.

Boric Acid Poisoning.

Best, C. L., in *Journ. Am. Med. Asso.*

The idea that boric acid is innocious is erroneous, as the literature of the subject gives five cases of severe intoxication and four deaths from the use of large quantities in different cavities.

"Summarizing these cases, it will be found that nausea and uncontrollable vomiting were present except in Welch's cases, all of which recovered, and all being cases in which the application was made to the vaginal mucosa, from which we may assume some difference in the absorption between this and ordinary raw surfaces. The same is true of the papular erythema of the face, neck and chest, with the additional exception of Rose's case. Depression of the nervous system and general muscular weakness is constant. In the two cases in which the temperature was recorded it was subnormal throughout. A cold, clammy perspiration was present in one-half the cases. The pulse was feeble, but of normal frequency except in the fatal cases, where it gradually increased before death. An inflammatory condition of the pharynx, larynx and nares was confined chiefly to those cases in which there had been irrigation of the pleural cavity. Delirium was present in but one case, and that just before death. The postmortem and histologic findings in the one case that came to autopsy were those of an acute intoxication. The onset varied from twelve hours to seven days, usually beginning with profuse vomiting, followed in the course of a day by an erythema, weak pulse, depression of the nervous system and general bodily weakness."

Earache.

Makuen (*Pa. Med. Journ.*) does not think the symptom earache (for it is only a symptom) has received the attention it deserves at the hands of the profession. The layity should be instructed as to its serious import, and the general practitioner should give it his best skill. The principal conditions giving rise to earache are foreign bodies in the external auditum canal, furunculosis or boils in the external canal, and pressure within the middle ear, due to inflammation of the lining membrane. Reflected pains from nose and throat are common, and these organs should always be examined. With foreign bodies do nothing which cannot be done under direct supervision of the eye. Generally it can be best removed with the aid of the syringe, directing the stream with a small nozzle above and behind the body. If this does not succeed it is better to let it alone until all inflammation has subsided and radical measures for its removal instituted. Instruments must be used with great care, as more injury is done in efforts

at removal than by the foreign body.

In boils do not use moist poultices; use instead dry, hot sand or salt bags, changed frequently. A 10 per cent carbolized glycerin solution is both anesthetic and antiseptic. These are benefited by free incisions and, without waiting for evidences of pus, to be followed by hot sterile water to increase bleeding, applying the carbolized glycerine solution and packing with iodoform gauze. Keep bowels open and give supportive treatment to prevent recurrence.

Middle ear disease requires prompt treatment. The carbolized glycerine may abort inflammatory process, but if it does not and suppuration supervenes, the drum membrance must not be allowed to rupture, but must be incised. This must be done under strict antiseptic precautions. Make a free incision from the point of greatest bulging down to the floor of the tympanic cavity. A curved incision is preferred, using any small, long-shanked knife. Dress with antiseptic gauze, and pledgets of cotton, and an over-dressing of collodion. Politizeration should rarely be performed in acute otitis media.

It is not a pleasant thought that the brilliant white note paper which your hand rests upon may have in it the fibres from the filthy garment of some Egyptian fellah after it has passed through all the stages of decay until it is saved by a ragpicker from the gutter of an Egyptian town; and yet it is fact that hundreds of tons of Egyptian rags are exported every year into America to supply our paper mills. At Mannheim on the Rhine the American importers have their ragpicking houses, where the rags are collected from all over Europe, the disease-infected Levant not excepted, and where women and children, too poor to earn a better living, work day after day, with wet sponges tied over their mouths, sorting these filthy scraps for shipment to New York. Our best papers are made of these rags and our common ones of wood pulp, which is obtained by grinding and macerating huge blocks from some of our soft-wooded forest trees. —David G. Fairchild in the *National Geographic Magazine.*

A colored lady got on a crowded car with a little baby. The child being restless, she tried to nurse it, but that did not seem to satisfy it, and pretty soon the tired mother said: "Now you look here, ef you don't stop you' foolin' and take you' dinner, I'll give it all to de conductor."

Copper to Purify Water.—The Homeopathic treatment of drinking water to free it from typhoid germs by introducing into it small, indeed, as compared to the size of the reservoirs, infinitetsimal portions of sulphate of copper, does not meet with much favor from either the medical profession or hydraulic engineers. The former doubt its efficacy if it is practicable. The latter deny its practicability, if it efficacious. The doctors say that copper in the form of a sulphate, which is soluble, if mixed with the drinking water in sufficient quantities to destroy the typhoid germs, or other disease germs, would be deleterious to the health of the community.

The engineers say that while the plan is feasible on a small scale, or in the laboratory, where the small quantty of water and the solution can be agitated and thoroughly mixed, it can not be accomplisfied in the huge reservoirs which are used to store water for the use of large cities. They say that a small part of the water in the reservoir



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may be affected, but that the greater portion of it will not receive any benefit. Water mixes slowly under ordinary circumstances, as can be seen at any place where a stream flows into a lake or other large body of water. Except where the surface of the water is agitated by high winds, the discolored waters of the stream may be traced for miles, running by itself through the clear waters of the lake, without any apparent admixture.

While the plan may be all that is claimed for it, it will be well to go slowly and to make sure that the process is efficacious and practicable, before spending any considerable sum to install a plant for putting it in operation on a large scale.

Venereal Diseases and the General Practitioner.—Professor Neisser of Breslau has recently published an appeal to the general practitioner to perfect himself in the diagnosis and treatment of venereal diseases. The idea that a specialist is required for them is absurd, he thinks. Venereal diseases, more than all others, belong in the domain of general practice, and medical students should be trained to differentiate and treat them. If every medical graduate were trained in the early recognition and means of absorbing these affections, this would prove the most important forward step in the prophylaxis of venereal disease. Neisser's article was published in the *Medicinische Woch.*, v, No. 15.—*Journ. A. M. A*

The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. L. CHARLOTTE, N. C., DECEMBER, 1904. NO. 12

Address all communications and make all funds payable to THE CAROLINA MEDICAL JOURNAL.

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EDITORIAL.

A Word to Our Subscribers.

We exercise scrupulous care in keeping our subscription and advertising accounts, but, being only human, an error will crèep in once in a while Cheerful and prompt correction of errors will always be made. It is very important, if we are to continue the improvements made in the CAROLINA MEDICAL JOURNAL, that past due subscriptions be sent in promptly. We believe that more than one-half of our subscribers prefer to have us make draft on them for the amount they owe THE JOURNAL each year, when we are sending out several hundred drafts and ask for them your kind protection. By so doing you help us and you obtain the benefit of the "cash-in-advance" discount

Can Influenza be Successfully Quarantined.

Within the past 20 years influenza has become an epidemic or fixed disease in America. We think we can truthfully say that as many deaths, directly or indirectly, are due to this infectious disease as to measles, scarlatina, smallpox or whooping-cough taken singly, or perhaps the mortality from influenza is as great as any two of these diseases combined. Certainly the number of people who annually suffer from influenza is greater than that of any other malady which at present attacks mankind. True, its death-rate is not so high as that of tuberculosis, pneumonia or typhoid fever, but we venture the statement that if our health authorities should publish the comparative statistics that many of us would be very much surprised. We regret that we have no such data at hand bearing upon this point and the main object of this writing is to draw the attention of county, municipal, state and national boards of health to this subject, with the hope that it will be taken up by them and thoroughly discussed. If in their collective wisdom it is found impracticable to apply local quarantine restrictions to this disease, well and good; if on the other hand it is believed that something can be done in the way of curtailing this widespread scourge we think such

steps should be inaugurated. Attempts at limiting the spread of this disease may show its way to contagion to be less through the atmosphere and more by contact than is commonly accepted. The time was when most of the contagious diseases were believed to inhabit the air but we now know, thanks to modern quarantine methods, that they are very largely contact diseases. If such restrictions can be applied to influenza as are applied toward curtailing the prevalence of measles, whooping-cough and scarlatina much good will be done. If it be found that the manner of contagion with influenza is different from that of the above-named diseases, still can there not be some rules devised and applied by health authorities whereby the number of cases of influenza may be lessened?

W. O. N.

The Late Dr. Dennis O'Donahue.

The local profession was grieved and shocked to hear of the death on Saturday, the 3rd, inst., of one of its oldest and best known members.

Dr. O'Donahue was an Irishman by birth, as have been so many distinguished individuals in our profession, and possessed all the warmth of heart and native wit which has everywhere rendered the Sons of Erin social favorites. He was prominent in the community, not only as a successful and popular physician, but had an enviable reputation as a business man and at the time of his death was the wealthiest medical man in the city of Charlotte, and perhaps in the State. But while eminently sagacious in the conduct of his material interest Dr. O'Donahue was ever alive to the high ethical traditions of the profession he loved, and no fellow practitioner ever accused him of any questionable methods of practice or selfish aggrandizement at the expense of his colleagues. It is equally true of our deceased friend, money was not the chief end of his labors, but numerous instances of quiet charity could be cited proving that the lofty ideals of the profession were not without their effect upon character and conduct. Many were his gratuitous services and numerous his gifts for the relief of suffering. In his character was blended the selfsacrificing physician with the shrewd judgment of the business man, a combination rare in our profession.

Dr O'Donahue was several times elected an alderman of this city, where his special knowledge and wise counsel was always exercised for the benefit of the community.

A loyal friend, a kind and genial associate, he is missed by a host of friends.

In *The World's Work* for November comment is made upon a new feature in Sanatoria, instituted by one in New England, for the treatment of purely nervous affections. It is well known that it is detrimental to the progress towards a cure in this class of patients for them to discuss their ailments with each other. The institution in question goes a step further than interdicting such discussions, and gives to its inmates some useful employment in manual training of the higher sort. Special instructions are given in weaving denim, tablecloths, old-fashioned bed coverlets, moulding, carving, etc. The young people of the town are invited to participate in these classes and their healthy cheerfulness is an advantage to the residents of the hand-craft shop, as it is called in preference to a sanatorium.

The idea is not entirely new, for all

institutions for the treatment of the insane endeavor to draw the mind of its patients away from their troubles in various ways—employments, amusements, etc., but we do not remember to have seen the application of the underlying principles of the plan in a specially prepared institution before. The extension of the idea in the direction indicated is a good one and is worthy of consideration, especially in hospitals treating nervous disorders.

The Seaboard Medical Association.

The Ninth meeting of the Seaboard Medical Association of Virginia and North Carolina met in the spacious Elks' Hall in Washington, N. C., on Tuesday evening, Dec. 6th, and was called to order by Dr. M. Bolton of Rich Square, N. C.

The address of the orator on this occasion, Dr. T. Edwin Baird, Norfolk, Va., subject, "The Physician, His Task and His Reward," was a magnificent effort, bringing the orator showers of congratulations. The papers read before this society, as usual, were of a high order, and the discussions very instructive. The officers elected for the ensuing year are:

President, Dr. John E. Phillips, Suffolk, Va.

Secretary, Dr. John R. Bagby, Newport News, Va.

Treasurer, Dr. Israel Brown, Norfolk, Va.

First Vice-president, Dr. W. T. Parrott, Kinston, N. C.

Second Vice-president, Dr. P. St. L. Moncure, Norfolk, Va.

Third Vice-president, Dr. P. C. Jenkins, Roxobel, N. C.

Fourth Vice-president, Dr. W. A. Plecker, Hampton, Va.

Orator, Dr. Joseph Akerman, Wilmington, N. C.

The society will meet next year in Newport News.

The profession and citizens of Washington gave the visiting brethren a hearty welcome, entertaining the members of the association and other guests at a banquet on the night of Wednesday, Dec. 7th, and a dance, complimentary to the Seaboard Medical Association on Thursday night by the Halcyon German Club.

IN MEMORIAM.

Whereas, It has pleased our Heavenly Father to take from our midst, on September 25th, 1904, our friend and esteemed brother physician, Dr. W. D. Young, we bow with saddened hearts in humble submission to an ever all-wise though mysterious Providence, and pass the following resolutions of respect to his memory. Therefore be it

Resolved, 1st, That we, the Durham Academy of Medicine, have lost a loyal member, the State an honorable citizen, and the community a faithful and efficient physician.

2nd, That we extend to the bereaved family our heartfelt sympathy in this sad hour of affliction, devoutly praying that in this their sore bereavement they may lean, with perfect trust, on the strong arm of Him who is our Great Physician.

3rd, That a copy of these resolutions be sent to the bereaved family, be published in our city papers, a copy be sent to the Charlotte and the Carolina Medical Journals for publication and a copy be spread on a page of our minutes.

GEO. H. ROSS, M. D.,
A. G. CARR, M. D.,
J. M. O'KELLY, M. D.

Editorial Notes.

QUINCY, ILL., Oct. 25.—Death for insane and incurable was advocated at last night's session of the National Prison Congress, by Dr. Henry C. Hatch of Quincy. The doctor advocated homicide or the right to let a person take his own life when he was found to be incurable and also would have the State to dispose of permanently incurables by putting such persons to an easy death."

Such ideas coming from pseudo scientists and dabblers in questions of social economics are not unusual, but it is very much out of the usual order to find a regular physician advocating such revolting measures that are so foreign to the principles underlying the practice of medicine. The philosophy of a Plato could go so far as to advocate the destruction of the defective and dependent classes that were no longer of service to the state; savage and semi-civilized peoples kill those wounded in battle rather than be burdened with their care; Christianity and civilization inculcate principles that are of higher order than these, in prompting the care and maintainance , by state aid if necessary, of those unable or incapable of caring for themselves. The medical profession as a class cannot afford to be the leaders of a return to barbarism, and will not for a moment countenance the views of the author, as indicated by the clipping.

The officers elected at the 30th annual meeting of the Mississippi Valley Medical Association, held at Cincinnati, O., October 11-13, are as follows: President, Bransford Lewis, M. D., St. Louis; first vice president, Frank Parsons Norbury, M.D., Jacksonville, Ill.; second vice-president, J. H. Carstens, M.D., Detroit, Mich.; Secretary, Henry Enos Tuley, M. D., Louisville, Ky.; assistant secretary, John F. Barnhill, M. D., Indianapolis, Ind.; Treasurer, S. C. Stanton, M. D., Chicago, Ill. Next place of Meeting, Indianapolis, Ind., October, 1905.

HENRY ENOS TULEY, Sec'y.

Good Lay Advice to Young Physicians.—If your patients were all reasonable men and women, your task would be easy; but they are not. Even in their best estate they are not all reasonable men and women and you will have to deal with them when they are not in their best estate, but are morbid. You will have to deal with patients who will throw your medicine out of the window, and still expect you to cure them; in one house with a mother busy with other things and careless of the sick child; in another house with a mother whose weak and tearful sympathy does much to negative the influence of your presence and the effect of your medicines. It is not enough for you to know physiology and anatomy and therapeutics; not enough for you to know what your medical school has told you; you must know men and women—their physical constitutions, their mental and moral constitutions. You must understand them—their life, their narrowness, their prejudices, their unreasonableness. You must see into them, that you may minister to them. —*The Outlook.*

They Quit Even.—A red-headed man met a bald-headed man on the street one day. The red-headed man said to the bald-headed man:

"Huh! there don't seem to have been much hair where you came from."

"Oh, yes," replied the bald-headed man, "there was plenty o' hair, but it was all red, and I wouldn't have it." —*Lippincott's Magazine.*

Selections From Our Exchanges.

The Correction of Abnormal Conditions of the Blood Relative to Surgical Operations.

By S. C. Emley, A. B., M. D., of Wichita, Kan., late Pathologist Augustana Hospital, Chicago, Ill.

Frequently the surgeon is called upon to operate on patients who, when they first present themselves, are in no condition to stand an operation on account of deficient quantity of blood or the poorness of its quality. On the other hand, it is desirable that the patient regain his normal condition as soon as possible after operation, whether the abnormal condition of blood is due to the operation or not.

The ideal remedy is that which will restore the normal condition of the blood in the shortest time with the least disturbance of the rest of the body, the digestive system particularly. Less necessary are palatability and cost of the remedy. To determine which of several preparations best fulfilled the above conditions was the purpose of this investigation.

All of the preparations used being recognized as good, Dr. A. J. Ochsner gave me permission to prescribe them as I saw fit to certain of his patients in Augustana Hospital. Only those cases were selected whose appearance indicated the need of a hematinic. As often as possible similar cases were paired off, one patient being given one preparation and the other patient another, and the results compared. The patients were paired according to pathological condition, age, sex, general condition and the condition of the blood as to hemoglobin and erythrocytes at the beginning of treatment. The preparations used were malt with iron and manganese; malt with iron, quinine and strychnine; Blaud's pills, and the preparation known as pepto-mangan (Gude).

After watching the effects of the medication on the patients, and observing the records, it is seen that Blaud's pills acted quickly, but constipated; the malt combinations caused nausea in a few patients, and the malt, manganese and iron combination caused constipation in nearly all. The pepto-mangan, given in milk, was agreeable to take, and in no case did it cause nausea or constipation. While in two cases the Blaud's pills acted more quickly than pepto-mangan in two similar cases, on the whole the latter gave better and quicker results than any of the others, and at the same time caused no digestive disturbances in any of the cases.

Although the investigation was undertaken for the purpose of finding out the best hematinic for surgical cases, it was tried in one case of chlorosis and in several obscure medical cases.

The following table shows the results obtained in all those cases where Gude's preparation was given. One to four drams were given in milk to each case, three times a day. The hemoglobin was estimated with Von Fleischel's hemometer, and the erythrocyte count made with the Thoma-Zeiss apparatus. The first blood count was made previous to operation in all surgical cases, and the last a short time before the patient's discharge from the hospital. The second count was never made immediately after the operation because of the temporary derangement due to the anesthetic and the loss of blood.

Name	Age	Diagnosis	Date	Erythrocytes per 1 c. c.	Per cent. of Hemoglobin
1. G. N.[1]	53	Carcinoma of stomach	9-29-03	2,920,000	33
			11- 8-04	2,520,000	36
2. Mr. L[1]	49	Carcinoma of stomach	10-29-03	2,665,000	27
			12-19-03	2,300,000	26
3. Miss J.	17	Acute menorrhagia	12- 4-03	2,310,000	36
4. Mrs. E. K	33	Menorrhagia	12 7 03	4,340,000	44
			1-18-04	5,100,000	82
5. Mr. S.	23	Neurasthenia(?)	12-16 03	4,060,000	60
			1-14-04	4,560,000	75
6. Mr. K.	35	Tuberculosis of mesenteric glands	11-15-03	3,825,000	62
			1- 4-04	4,716,000	66
7. Mrs. F.	23	Pelvic abscess	10-25-03	4,060,000	60
			12 11-03	4,975,000	78
8. Mrs. A.	34	Pelvic abscess	12-10 03	3,195 000	53
			1 11-04	4,560,000	78
9. Miss A. J.	16	Chlorosis	10-25 03	3 010,000	45
			11-28 03	5,676,000	80
10. Mrs. H.	40	Myoma of uterus	7-15-03	2,100,000	42
			9 15-03	4,500,000	80
11. Johnny L.	13	Tuberculosis of hip	12- 1-03	2,680,000	45
			1-20-04	4,100,000	62
12. Mr. E. P.	21	Tuberculosis of ankle	10-29-03	4,310,000	66
			1-23-04	5,166,000	75
13. Johnny F.	9	Extensive burn and infection of surface	11- 9-03	3,560,000	50
			1-23-04	4,362,000	68
14. Miss E. B.	17	Perforative appendicitis	11-25-03	3,600,000	55
			1-22-04	4,250,000	69
15. N. N	29	Suppurative appendicitis	12-20-03	4,200,000	60
			1-20-04	5,120,000	75
16. Mr. B.	28	Chronic appendicitis	1- 2-04	3,565,000	62
			1-23-04	4,800,000	78
17. Mr. S.	37	Gangrenous appendicitis	10-10-03	3,300,000	45
			11-27-03	3,010,000	40
18. Miss W. J	29	Empyema	11-20-03	2,740,000	44
			1-22-04	3,820,000	60
19. Mr. F.	44	Cholelithiasis Chronic appendicitis	11-23-03	3,560,000	57
			1-12-04	4,640,000	78

[1] Incurable.

In the nineteen cases tabulated there is an average increase of 800,000 erythrocytes and of 14.5 per cent. hemoglobin. This improvement was during forty days on an average. The usual time a patient stays in the hospital is twenty-one days, when the case is of ordinary severity from a surgical standpoint. Such cases were placed on tonic treatment and showed rapid improvement, but of such cases only one (Case 16) is noted because it might be urged they would improve equally fast with or without a tonic.

It is seen from the above table that even in the cachexia of carcinoma there is a temporary improvement, which shows that in the use of this tonic we are dealing with a powerful hematinic. In Case 17 there was no improvement, the patient dying shortly after the last count. At the autopsy I found a pyogenic abscess in the liver as large as an orange and about 200 c. c. of pus below the right kidney, which explained the retrogression. In all of the other operated cases the improvement was steady and marked, especially in uterine diseases accompanied by loss of blood. In the case of chlorosis (Number 9)

the improvement was remarkable, the patient being discharged cured in a little over a month, at which time all the symptoms had disappeared.—*Med. News,* September 24, 1904.

Chloretone.

In the *Therapeutic Gazette* for July, Hutton summarizes some therapeutic applications of chloretone. First, in the treatment of vomiting of pregnancy he found it efficient in five out of six cases. He at first employed doses of five grains in cachet or capsule, but latterly has found 3 grains sufficient, or even a tablespoonful of saturated aqueous solution containing barley four grains to the ounce. It has been his rule to direct the first two or three doses to be taken at intervals of half an hour or 20 minutes if necessary, and subsequently at longer intervals, according to the sensations of the patients, placing a limit to the total number which might be taken. His experience is that seldom more than three doses are required, and after the first trial one dose is often sufficient on subsequent occasions. Second, he has found chloretone extremely useful in the sickness accompanying the menstrual period in many girls. Third, in seasickness its power as a preventive was shown in four cases under his observation. Fourth, chloretone gives relief of stomach pains, especially when of neurotic origin, exhibited in the same manner (preferably in solution). He has not tried the effect of chloretone on vomiting due to grave organic conditions, but there also he believes that it is useful. The drug acts no doubt by rapidly benumbing sensation in the stomach. It has a pleasant taste, produces an agreeable feeling of warmth, and the slight hypnotic effect produced by 12 or 15 grains frequently aids the process of relief. He believes that in cases of neurotic origin and in seasickness especially, the effect of the drug is enhanced if given with a confident assurance of its efficacy. His experience with chloretone as a hypnotic in doses of 15 to 20 grains has not been favorable.—*Cleveland Med. Journ.*

Clippings from Lay Exchanges.

GLYCOHEMIA.

In an advertisement of a much-exploited patent medicine, the following testimonial appears:

"It is with pleasure that I write this testimonial in behalf of my daughter, Lillian, who was very sick. Our doctors said her blood had turned to sugar at the critical time of womanhood. She could not walk or stand, but had to lie in bed almost all day for five long months. Our doctor did all he could for her, but she got worse all along. I was anxious about her; in fact all our family was almost crazy to think she would die so young.

"I had heard and read so much of Dr. ——'s blood nerve remedy that I went and got a bottle. On the second day I saw an improvement in her condition. I was overjoyed and kept on and got another bottle, and when the second bottle was used up she apparently came back to life."

REMOVED INSIDE OF EYEBALL—WHAT AN ABSCESS MAY CAUSE.

Drs. —— and —— removed the inside of the ball of the left eye of the little . . . son of Billy —— and wife the same being caused by an abcess forming on the eye."—*Anderson* (Ind.) *Herald,* April 21, 1904.

WHAT MILLIONAIRES CAN HAVE—DIA-PED-ES.

"—— ——, . . . worth several millions of dollars, . . . came

here . . . to recover from an attack of diabetes in the right foot."—*Atlantic Review,* Atlantic City, N. J., June 10, 1904.

HANDBILLS.

"NOTICE.—Dr. — — ———, Dentist, —— building, —— and —— street, has returned from the bedside of his mother, who was ill, and is again ready to attend to the wants of his patrons."—*Johnstown Democrat,* advertising columns.

READERS MAY TAKE THEIR CHOICE.

"At an early hour this morning —— was resting fairly well, but was very restless."—*Johnstown Democrat,* Aug. 20, 1903.

CARRY A PAILFUL WITH YOU.

"——— ———, medical superintendent of the ——— School of Psychology, . . . proceeds to say: ' . . . in the treatment of acute or chronic appendicitis, it is best to take [water] . . . in small quantities, but [it] . . . should be taken frequently—say a good mouthful every five or ten minutes during the day.' "—*Seattle* (Wash.) *Times,* July 31, 1904.

TOO MANY (PTOMAINE) JOLTS FOR THE MILK.

"MILK POISONED BY JOLT.— Dr. ——— ———, secretary of the ——— ——— State Board of Health, has completed his investigation into the cause of the ptomaine poisoning of . . . thirty . . . persons. . Dr. . . . is convinced that the jolting of the milk over the road before it had been cooled produced a chemical action which introduced the poisonous properties into the milk."—*Doylestown* (Pa.) *Republican,* Aug. 4, 1094.

WHICH AIR CELL?

"——— ———, . . . suffered two broken ribs and punctured an air cell of one of his lungs in a collision. . . . The doctor said the rupture of the air cell is likely to induce pneumonia."—*Stamford* (Conn.) *Advocate,* July 28, 1904.

APPENDICITIS IN THE BOWELS OF A SHIP.

"Ship's Surgeon ———, . . . diagnosed the case as appendicitis. . . . With none of the modern appliances of a surgical operating room, on board an ocean liner, deep in the bowels of the ship . . . these three skilled and daring surgeons set about to relieve the sufferings of a poor workingman. . . . Without doubt the past annals of surgery can not show a more unique and daring operation." — *Burlington* (Vt.) *Free Press,* Aug. 17, 1904.

—*Jour. A. M. A.*

Men do not live by bread alone and it is true also that a publication cannot subsist upon compliments. If you will take the Editor's word, no compliment reaches the heart like a renewed subscription.

Old Mother Hubbard,
She went out and rubbered,
New neighbors were just moving in.
"I'll just take a peep.
My! Their furniture's cheap!"
She said, with a satisfied grin.

—*Chicago Tribune.*

Is a Large Practice Advantageous to Physicians?—Under this title we find the leading editorial for July, 1903, in the St. Louis *Medical and Surgical Journal.* In it the writer declares somewhat in favor of a large practice, provided the work done is paid for. The point is made, however, that it cuts the physician off from opportunities of perfecting himself and even of keeping himself abreast of the times. He also sacrifices all kinds of social pleasures, and is apt, in due time, to be worked to death. Besides this, he neglects his patients by giving each insufficient time, in addition to being less competent than he would be did he devote some time to study. This results in faulty diagnosis, imperfect treatment and bad general results. Such an individual will find it increasingly difficult to get and retain new patients, although likely to hold his old ones, meanwhile gradually descending along that inglorious path that leads him into the valley of the much pitied class of "moss backs." Practice is likely to diminish. Finally he realizes that he has neglected to continue his studies, and that he must start out afresh to get a new lease on practice. "It is no longer the obtaining of a large practice, but rather of a good one, that is the object." Medical men are gradually beginning to realize that a large practice is a great disadvantage. Many look upon it as a boomerang, and raise their prices for the purpose of lessening their work without diminishing their pay.

Doctors as Book Buyers.—The largest part of a doctor's equipment is his books. Physicians usually keep more closely up with the procession, from the viewpoint of books than lawyers. The doctors have to do it, because much of their reputation among their associates depends upon the accuracy and the modern finish of their knowledge. A lawyer can more easily dispense with new law books than a doctor with the late medical books. An up-to-date doctor has a much more expensive library, as a rule, than a minister, and it is almost as expensive as a lawyer's, the difference being that a lawyer's whole equipment is books, while a doctor must have a laboratory and a full equipment of instruments.—*Louisville Courier-Journal.*

Fair Prey of Quackery.—The American people seem to be peculiarly susceptible—the fair prey of fad ideas and crank theories where health is concerned. We are an enthusiastic race, swayed by impulse and carried away by momentary impressions, but eventually there is a second thought that swings the pendulum back again to the normal. This is bound to be so with the Christian Science and other fads, such as osteopathy, etc. Is it not just as well for the medical profession to keep their hands off and let matters adjust themselves?

It is not true, however, that quackery is confined to America. The English and German medical journals frequently refer to the evil. One difficulty in handling these questions is the existence of two different schools of medicine and the ignorance of the general public of the scientific basis of modern medicine and surgery.—*Post Graduate.*

The Safety of Chloroform.—It may be said that, in the minds of the laity and to some extent the medical profession, the chief obstacle in the way of surgical operations is dread of the anesthetic. The number of deaths from chloroform narcosis (to put ether out

of the discussion), when compared to the prevalence of the use of the drug, is insignificant; but deaths do occur, and often so suddenly and unexpectedly as to be charged against caprice rather than the dose of the drug. The large amount of investigation which has been undertaken on this subject has had at least one conspicuously practical effect—the anesthesia is no longer entrusted to the tyro, but those are selected to administer it who have had the necessary experience to guide them in this most important adjunct to surgical procedure. The third report of the special chloroform committeee of the British Medical Association is the latest work on the subject of chloroform anesthesia, and deals principally with percentages as regards the dose. The gist of the report, although the committee's labors are not yet by any means completed, is that the effect of chloroform is in proportion to the dose, and that a small dose, properly administered with a suitable inhaler, even as low as two per cent. chloroform in atmospheric air, will produce surgical anesthesia with a minimum of risk. Experiments on the isolated heart brought out the fact that small doses exerted a depressant effect, but this effect disappeared in the withdrawal of the chloroform—while under large doses the depressant effect was permanent. It was also observed that the blood takes up and retains no small part of the chloroform, a circumstance involving possible menace to safety, especially in the case of large doses.

Danger, therefore, lies in high percentages, absolute safety in low percentages. — Editorial *Atlanta Journal Record of Medicine.*

Fresh Air.—The celebrated Dr. Darwin, who lived in the early part of the last century, was so impressed with a conviction of the necessity of good air, that being very popular in the town of Derby, England, once on a market day, he mounted a barrel, and thus addressed the listening crowd: "Ye men of Derby, follow citizens, attend to me! I know you to be ingenious and industrious mechanics. By your exertions you procure for yourselves and families the necessaries of life; but if you lose your health, that power of being of use to them must cease. This truth all of you know; but I fear some of you do not understand how health is to be maintained in vigor—this then depends upon your breathing an uncontaminated air; for the purity of the air becomes destroyed where many are collected together; the effluvia from the body also corrupts it. Keep open then the windows of your crowded workshops, and as soon as you rise, open all the windows of your bed-rooms. Never sleep in a room without a chimney in it, nor block that up. Inattention to this service, be assured, will bring diseases on yourselves and engender among you typhus fever, which is only another name for putrid fever, which will carry off your wives and children. Let me again repeat my serious advice,— open your windows to let in the fresh air at least once a day. Remember what I say; I speak now without a fee, and can have no other interest than your good, in this my advice."

It would be well indeed, were it possible to extend this excellent advice to our people, especially those living in crowded tenements in our large centers of population; nay, we would go even further, also to those living in "swell" apartments. Although it would be found impossible, in the majority of cases, to "never sleep in a room without

a chimney," as open grates are very little used in this country, the advice to thoroughly air the rooms at least once a day, by keeping the windows open for a short time, can easily be carried out, and even if they should be entirely closed throughout the day (we refer especially to the winter season) the rooms can be perfectly ventilated during the night by lowering one or all a fraction of an inch. This imperceptible opening is a regular life-saver—so to speak. Ventilation by *some* means or another is absolutely indispensable; such ventilation whereby impure air may be exchanged for pure—sickness or health.—*Med. Mirror.*

Medicine Among the Aborigines.—That the science of medicine is not confined entirely to the civilized world is shown by Dr. Colquhoun in his presidential address to the New Zealand branch of the British Medical Association. Colquhoun enumerated some facts of primitive medicine collected by various observers among the aborigines of Australia and the South Seas generally. Thus wounds are treated by a thorough sucking, followed by application of bridgerong, a kind of resin exuding from the bark of trees. Abscesses are poulticed and lanced. Cold water baths and bleeding are practiced in fevers. Two cases of tetanus are reported as having recovered, the treatment being the formation of a urethral fistula. The natives have a surprising knowledge of the vegetable materia medica, certain plants being known for their cathartic, astringent or emetic qualities.—*Medical Age.*

A certain manufacturer, putting out an unusually elegant preparation made from the ordinary galenicals was surprised recently to receive a report of a case of poisoning, following the use of his remedy as directed. On looking the matter up it was ascertained that the method of dropping adopted by the user gave at least three times the intended dose, with the result described. Could anything, next to the ordinary galenical preparation, be more uncertain than the drop or the teaspoonful dosage so commonly suggested? The only salvation from this is the well-known uncertainty of the preparatons, which usually and fortunately carry less rather than more of the one or more principles on which the activity of most of them depends. —*Alk. Clinic.*

Peruna.—I noticed the question about peruna in your last issue. In a drug store where I fixed up a laboratory an imitation of peruna was manufactured and sold. This imitation is composed of:

Comp. fl. ext. of getian oz. 90
Fl. ext. of taraxacum .. conj. j oz. 52
Acid phos. dil. oz. 75
Tr. cardamon comp. oz. 90
Syrup simplex conj. ij oz. 104
Glycerin conj. vij oz. iv
Sherry wine conj. ix. oz. 108
Trit. Aloin oz. iv
" Cascarin z ij gr. 120

This imitation appeared to me to be a very clever one; if anything, it seems to be an improvement on peruna, so far at least as sherry wine is preferable to whiskey. I. LADOFF...

Schenectady, N. Y. —*Med. World*

It is reported that beriberi is causing considerable suffering among the Japanese troop at the seat of war.

German teeth are becoming so bad that the municipalities are employing dentists to care for the teeth of the school children.

Newer Materia Medica.

Tonsilitis.

By Charles J. Drueck, M. D., Chicago, Ill.

Tonsilitis is an affection which every physician is constantly called to treat, and in which the chief symptom that brings the patient to us is pain, especially on swallowing. The cause of this pain is manifest on a little inquiry into the physiology of the tonsil.

The tonsil itself is composed of lymph adenoid tissue which is covered with stratified epithelium. On the surface are twelve or fifteen openings (Lecunæ) which are covered with mucous membrane and lead into the tonsils. There are follicles of the mucous glands which are numerous in the lacunæ. In the connective tissue structure around these lacunæ are numerous small lymphatic glands which make up the body of the tonsil.

The tonsil is principally concerned in deglutition. By means of the constrictors of the pharynx and the tongue the bolus is propelled toward the esophagus and in doing so it must brush against the sides of the tonsil. The lacunæ thus squeezed pour out the mucin they contain, which lubricates the bolus and assists its passage without friction.

Let us suppose infection enters at the follicular openings. It immediately finds its way to the bottom of the lacunæ and is deeply seated in the tonsil. The numerous lymphatics try to gather it up and in so doing become loaded and the whole tissue congested. The first effect of this inflammation is a venous engorgement, which prevents the proper function of the follicles. More mucin is not expelled and what is formed is shut up. Thus the surface of the tonsil becomes dry and red. Friction occurs whenever delutition is attempted with the well known effect—a sharp lancinating pain. The intensity of the pain is in relation to the congestion and hence dryness and roughness of the tonsil.

Treatment.—In the treatment of tonsilitis it is well to remember that this disease is at first only a local disturbance and if promptly and efficiently treated will remain so. The systematic symptoms—fever, headache, etc., only develop when there is considerable infection taken up; therefore the following course should be instituted early in the case. The first indication is to increase local circulation, and the best therapeutic agent is heat. In the first place, confine the patient as much as possible to the house. Children should be put in bed. By staying indoors the patient breathes warm air only; usually free from dust and other irritating substances. The external application of the hot water bag greatly increases the venous circulation and so relieves the congestion, as does also the drinking of hot water. This drinking bathes the parts, as well as adding a large amount of water to the bowels and so increases the action of both bowels and kidneys. This washes out the infection as it is taken up by the system. This drinking of water also increases arterial tension, which prevents stasis.

Local treatment.—A local remedy must fill two requirements— a detergent antiseptic and a degree of permanency of effect. Many of the remedies are antiseptic, but they are not exosmotic enough to increase the circula-

tion, or else their effect is too transient and their use tires the patient. Locally I have grown to use but one remedy, and that is glyco-thymoline. I prescribe equal parts of glyco-thymoline and water, to be used in an atomizer. I get better results with this than anything else I have used. I always use it in an atomizer, because gargling is necessarily painful, while a spray is not. Glyco-thymoline promptly relieves the dry, congested condition, and by adhering to the tonsil protects it from external irriation. Its anodyne effect is immediate and lasting. I instruct my patients to use it frequently and because it is pleasant and its action prompt, I find that they need no other instruction but use it thoroughly. As glyco-thymoline is non-poisonous, it makes no difference as to how much is swallowed and its action does not upset the stomach, but tends rather to assist the destruction of any of the plugs that may be swallowed.

I find by this method of treatment that my cases are nearly all cured in twenty-four to thirty-six hours; that I need no other medicament at all, because the system does not become clogged with toxines.

I report below two cases, not for their individuality, but because their prototypes are constantly occurring to every physician.

Baby J., child six years old. had been sick for two days, and the previous day the mother had seen sore throat and treated it with salt, vinegar, etc., to which the child rebelled. When seen, I put child on spray of equal parts of glyco-thymoline and hot water and allowed sipping of hot soups and liquids; advised use of spray every half to one hour. Next morning mother telephoned I need not come, as the child was perfectly well.

Mr. H. K., subject to repeated attacks of tonsilitis, but refuses tonsilotomy, because he is afraid it may injure his voice—he is a vocalist. Several months ago I recommended spraying the throat with glyco-thymoline, one-third strength twice daily and whenever the throat is at all sore to use it frequently. He has not had an attack of sore throat all this winter.

Alkalometry Versus Galenicals.

Every practitioner has recognized the want of reliability of the galenical preparations as dispensed by the pharmacist. It seems impracticable to obtain such preparations of the due degree of potency from different druggists, or from the same druggist at different times. The leaves or flowers or roots, etc., of the same medicinal plants vary in the prescription store—whether due to the inferiority of different samples, or the time of gathering and mode of preparation for the market, or the length of time they have remained in bulk or on the shelves of stores. It needs no further proof than that of experience that most of these galenical preparations, as found even in the best of drug stores, are unreliable—sometimes too strong, but most frequently too weak. The physician scarcely knows the proper dose of such preparations, coming from different reliable druggists—however honest they may be.

Such, however, is not the case with the *alkaloids*. So much morphine and no more is derived from the poppy, so much strichnia, from strychnos nux vomica, etc.

The time is at hand when the practitioner has learned these facts, and no one more than he should rejoice that the alkaloids have been extracted and prepared for use from such a large number of medicinal plants, etc.

The alkaloidal method makes it easy

strange that so many of the standard text-books on materia medica and therapeutics have not dealt with this subject as they should have done. We hope for improved standard text books for our students and practitioners.

Hare in *Practical Therapeutics* says: "If a census could be made of those who die annually from the use of drugs which are impure or useless from weakness the writer believes that a most alarming array of figures would be presented. For many years this was unavoidable, because our knowledge of the active principles of drugs was deficient. At present these difficulties have been largely overcome." Speaking of vario to prescribe "the smallest possible quantity of the best obtainable means to produce a desired therapeutic result." These alkaloidal preparations also enable the physician who has to dispense his own drugs to carry about with him as large a variety of the active principles of different drugs as he is apt to need in his routine practice.

With reference to such preparations the country doctor, as a rule, is ahead of the city doctor, who still sends his old galenical prescriptions to the pharmacist. Hence the frequent difference in the reports as to the value of different drugs, as prescribed galenically or alkaloidally. Economy of space, convenience of administration and equable reliability of preparations are all in favor of alkalometry. It is surpassing ability in preparations, one sample of tincture nux vomica "contained twice as much strychnine and brucine as it should, and had twice as much solid residue. On the other hand, a tincture of nux vomica contained only a trace of alkaloid but had much inert solid residue." "All these disadvantages may be avoided" by using "assayed goods, or the physician should employ the a kaloids in pill form. A poor drug t the physician is worse than a rust knife to the surgeon."

It is not a logical deduction fror this arraignment of the usual crude ga lenics that the active principles shoul be adopted in the case of every dru where the active principle has been iso lated, and if these active principles rep resent definite and pure preparations should there not result from their us accurate, definite constant results?

If you are interested write for a com plimentary copy of Abbott's Alkaloida Digest, a brief review of Alkaloida Therapeutics, giving much good an thoroughly reliable information on a great number of active principles. Address The Abbott Alkaloidal Co., Ravenswood, Chicago, Ill. Mention this journal.

Every Physician Knows.

In the *North American Practitioner*, under the head of "Intestinal Antisepsis," reported by Dr. Pettingill of New York City, we find some excellent experiences and from which the following is selected:

"Every physician knows full well the advantages to be derived from the use of antikamnia in very many diseases, but a number of them are still lacking knowledge of the fact that antikamnia in combination with various remedies has a peculiarly happy effect; particularly is this the case when combined with salol. Salol is a most valuable remedy in many affections; and its usefulness seems to be enhanced by combining it with antikamnia. The rheumatoid conditions so often seen in various manifestations are wonderfully relieved by the use of this combination. After fevers, inflammations, etc., there frequently remain various painful and

annoying conditions which may continue, namely: the severe headaches which occur after meningitis, a 'stitch in the side' following pleurisy, the precordial pain of pericarditis and the painful stiffness of the joints which remain after a rheumatic attack—all these conditions are relieved by this combination called 'Antikamnia & Salol Tablets', containing 2½ grs. each of antikamnia and of salol and the dose of which is one or two every two or three hours. They are also recommended highly in the treatment of cases of both acute and chronic cystitis. The pain and burning is relieved to a marked degree. Salol makes the uric acid and clears it up. This remedy is a reliable one in the treatment of diarrhœa, entero colitis, dysentery, etc. In dysentery, where there are bloody, slimy discharges, with tormina and tensmus, a good dose of sulphate of magnesia, followed by two antikamnia and salol tablets every three hours, will give results that are gratifying."

Toxic Properties of Tea and of Coffee.

Both tea and coffee are excitants of the nervous system, producing sleeplessness through increasing the action of the heart. This condition is followed by reaction, which in sensitive subjects approaches a toxæmia, comparable to that from the abuse of alcohol or opium. The symptoms from acute or chronic caffeism are feelings of apprehension, with a vague nervousness, tremulousness, vertigo and various digestive disturbances. The effects may prove more deleterious than mere temporary annoyance, and may lead to persistent functional disorder of the nervous system. With recent years Dr. Haig has pointed out a still further danger from these beverages. He has shown that they are carriers of xanthin products, which load the tissues with uric acid, and occasion the body various disorders due to the presence of that excrement.

Coca has, happily, none of these ill effects, while possessing all the advantages of an exhilerating stimulant that might well be employed as a daily beverage. Mariani, of Paris, prepares a fluid extract of Coca, termed The Mariani, which represents all the qualities of true Coca. A teaspoonful of this in a cup of hot water—with sugar and cream if desired—forms a very pleasant drink, not unlike a good breakfast tea in flavor. This is not only a stimulant to digestion, but will aid the system in the performance of its functions, instead of gradually loading up products in the tissues which will ultimately impede activity. As a tonic-stimulant, Vin Mariani may be taken either before or after meals. It will promote assimilation and impart a sense of well-being. Coca does not excite to an excess of nervous effort, but has a marked influence upon muscular tissue, through converting certain stored-up elements into usefulness. Thus it is a true reconstructive tonic which will tend to maintain the balance of the system in its wear and tear of existence. —*The Coca Leaf*, November, 1902.

The psychological depressions and neuralgias so common in the period following a debauch, are lessened or disappear altogether by the use of Celerina.

Elongation of the Uvula.—As a gargle in sore throat or elongation of the uvula, Kennedy's Dark Pinus Canadensis has very general endorsement, the usual proportion being a teaspoonful to a glass of water.

Listerine Dermatic Soap.—The profession will be pleased to note that the Lambert Pharmacal Co. is introducing a new product—Listerin Dermatic Soap. The manufacturer claims special merit for this article, and feels confident that it will be extensively prescribed by physicians in the treatment of diseases of the skin. The antiseptic and detergent properties of Listerine "Dermatic" Soap will prove highly beneficial in the treatment of the various cutaneous inflammations and eruptions, and in combating all vegetable and animal parasitic diseases, in diseases of the suborifarious and sebaceous glands and hair follicles, as well as for the relief of excessive and offensive perspiration.

This product, coming as it does from the Lambert Pharmacal Co., needs no further mention than the mere suggestion of its therapeutic application. The universal enjoyment of Listerine is one of the notable achievements of modern medical science.

Sanmetto in Cystitis, Urethritis, and in Inflammation of Bladder Neck; also in Impotency.—My experience with Sanmetto has been most satisfactory, from the fact that I have been enabled to get favorable results with my patients. I have used it in a variety of cases during the last ten years, as cystitis, urethritis and inflammation of neck of bladder. As a remedy in impotency I know of nothing of superior efficacy. I do not keep a clinical record of my cases, so am unable to give reports in full detail. I can, however, heartily recommend Sanmetto to the medical profession as a remedy that has no superior where indicated, if faithfully used by the afflicted.

F. M. Abbott, M. D.

Indianapolis, Ind.

The Local Treatment of Erysipelas with Acetozone.—I had an ugly case of facial erysipelas in a woman of about thirty-eight years. I used as a local application, to begin with, a saturated solution of boric acid, and depended largely upon tincture ferric chloride as an internal remedy. I got the attack under control and supposed I would have no further trouble, but all at once the disease began to spread over the scalp. The usual remedies did no good. I thought that if acetozone was the germ destroyer it was represented to be, it should be of use to me. So I made a solution of fifteen grains to two pints of water and used it freely on the scalp. I obtained results at once, and in twenty-four hours the disease had abated. J. Knowles, M. D.

Logan, Iowa.

White Paper Hurts the Eyes.—"Fewer spectacles would be worn," said an oculist, "if our publishers would use a brown or a dun instead of a white paper. Black print on a glistening white surface is bad for the eyes, whereas, on a dun or a brown-tinted surface it is restful and pleasant. It has been demonstrated by actual test that a man can read 10,000 words printed on the darker paper with less eye-strain than he can read 1000 words printed on the white. On this account the French, a wise people, have taken to printing books on paper of an agreeable dun hue."

The next Pan-American Medical Congress will be held at Panama in the first week in January, 1905. Dr. Julio Yeaza has been appointed president, and there will be four sections—surgery, medicine, hygiene, and the specialties.

Medical News and Items.

(*Clipped largely from the Medical Age, Detroit.*)

The next meeting of the International Dermatological Association will be held in New York City under the presidency of Dr. J. C. White, of Boston.

Dr. Darlington, Chief Commissioner of the Health Department of New York, estimates the annual loss caused to that city by tuberculosis at $23,000,000.

Sir Felix Semon, physician-extraordinary to King Edward VII. of England, was the guest of honor at a dinner given at the Chicago Club on September 15.

The annual report of Surgeon-General Robert M. O'Reilly states that the health of the soldiers of the United Army has improved during the last year.

The Canadian Medical Association has passed a resolution asking the government to control the sale of patient medicines on the ground that most of them contain alcohol and their use is becoming a menace to the country.

In Japan coughing children, according to the *Medical Herald* of Athens, Greece, are kept in a room in which naphthalin and camphor are vaporized until the cough is cured.

The Chair of Nervous and Mental Disease at the Medico-Chirurgical College.—Dr. William Pickett has been elected professor of nervous and mental diseases in the Medico-Chirurgical College. Dr. Pickett was born in Meadville; graduated from Allegheny College in 1892, and from the Jefferson Medical College in 1895. Since his graduation, Dr. Pickett has served as resident physician, assistant physician in the insane department, registrar to the neurological department, and official examiner of the insane at the Philadelphia General Hospital. Among the contributions to the literature of neurology the credit of first describing the infraspinatus reflex belongs to Dr. Pickett.

Every day, says the *Novoe Vremya,* the war is thinning the ranks of the St. Petersburg medical men, and thus the remaining contingent of town medical men is overloaded with work. Measures are being taken for recruiting a temporary staff to continue on duty during the absence of the city practitioners.

An Illustrious Colleague.—It is not generally known that M. Combes, the French premier, is a doctor by profession, and still retains his old copper nameplate, "Docteur Combes," on the front of his house at Pons. While not in active practice he never refuses his aid to such of his old townspeople who ask it, and he says he is more gratified by a victory over disease than by success in some political combat. He is also an ardent student of foreign languages and a devotee of the bicycle.

The English Courts Deal with Substitution.—Following closely upon the heels of the successful fight against medical substitution in New York City, wherein the proprietors of Pepto-Mangan (Gude), secured a permanent injunction against a big department store restraining it from exposing any preparation in any way similar to their protected article, word comes from London of the end of a substitution

case which will take its place in medico-legal history as something of a cause celebre, because of the high standing of the representative and distinguished professional men who appeared for the plaintiffs, and because the victory over the substitution was so sweeping.

The divorce figures of the Census Bureau, says an exchange, show that divorces are increasing in the country, and present some interesting figures, notably the fact that early marriages appear to be the least imprudent. In 1905 five out of every 1,000 men, gainfully employed, who had been married, were living in a state of divorce on census day, compared with four out of every 1,000 in 1890. This ratio of increase held good in nearly every occupation, except that there was no great tendency to divorce in the case of clergymen, teachers, professors in colleges, manufacturers, public officials, or textile mill operatives. Considering the occupations of males in five great classes, it was found that the highest percentage of divorce was in the class devoted to domestic and personal service. In this class eight out of every 1,000 who had been married were divorced, being 60 per cent more than in 1900. The lowest percentage was found among men engaged in agricultural pursuits. This number of divorced men here was four to every 1,000 who had been married, but this was considerably higher than the percentage of 1890.

Sir William Ramsey, the eminent scientist, is quoted in the *New York Times* as follows with reference to foods: "One of the new problems that chemic science may decide to attack is the manufacture of foods. Professor Fischer, of Berlin, is now at work on an albuminal substance to resemble the white of an egg. The only way to do this, of course, is to disintegrate and then build up. There has been some hue and cry of late about the danger from phosphorous matches. A German manufacturer has followed up this line of thought, and has invented a phosphorous that is not dangerous to factory operatives or any body else, and which gives us a match we can strike without carrying the box. There is room for experiments in the disposal of sewerage from large cities by chemic process. You are not yet confronted with this great problem in America so seriously as we are in England. We are experimenting over there with filteration processes on an advanced scale. Heretofore we have been handicapped by lack of definite laws concerning the pollution of rivers. Now the English rivers have been divided among four or five boards of managers, each with absolute authority in its own ditsrict. In the course of time some such arrangement may be advisable over here."

Bromide of Nickel in Epilepsy.—Coste (*Bull. Gen. de Therapeutique,* 1904, 80,) recommends bromide of nickle in the form of pills or syrup against epilepsy:

R.
Bromide of nickel....gram 0|05 gr. ¾
Powdered althea
Extr. of gentian...aa gram 0|03 gr. ½
F. pill I.

Bromide of nickle ..grams 10 dr. iij
Water... grame 120 oz. iv
Glycerin grams 15 gr. iv
Sugar... grams 250 oz. viii
—*Therep. Rev.*

BOOK REVIEWS.

THE HOUSEBOAT BOOK; The Log of a Cruise from Chicago to New Orleans; by William F. Waugh, M. D. Published by the Clinic Publishing Co., Chicago. Illustrated.

This volume is a history of a trip from Chicago to New Orleans by Dr. Waugh and his family. The narrative begins with the prelude, in which he states; "Once upon a time there was a doctor who, after many years spent in that pursuit, concluded to reform," and the "houseboat" idea came to him. The book describes the more important events of the trip, narrating the disagreeable features as well as the principal pleasures, giving accounts of the duck shooting, fishing, deer hunting and the killing of a panther in Baton Rouge, winding up with a chapter on Dangers and Delights, and one on Results. A delightful trip, one the doctor had earned by his close attention to duties, and one he will take again if you give him half a chance.

BEAUTY THROUGH HYGIENE. Common Sense Ways to Health for Girls. By Emma E. Walker, M. D., From the press of A. S. Barnes & Co., New York. 1904. Cloth. Illustrated. Price, $1.00.

In this day when preventive medicine is so highly lauded it is fitting that a book on the above subject should be written. Many of us believe that there is more of benefit to our race in teaching how not to get sick than in curing disease after it has fastened itself upon the victim. The author lays great stress on deep breathing, devoting 22 pages to this subject, and gives full directions for forming the habit of breathing properly. Exercise for healthy girls, including sports, are given 33 pages, correction exercises and massage, 20 pages, and so on. Digestion, diet, care of the bowel; in fact, proper living, is set forth in plain language, by one who is competent to write on the subject. If every girl and woman could be induced to read this book carefully the health of the American people in fifteen years would be vastly improved.

A TREATISE ON ORTHOPEDIC SURGERY. —By Royal Whitman, M.D., instructor in Orthopedic Surgery in the College of Physicians and Surgeons of Columbia University, New York; Associate Surgeon to the Hospital for Ruptured and Crippled; Orthopedic Surgeon to the Hospital of St. John's Guild; chief of the Orthopedic Department of the Vanderbilt Clinic; member of the Royal College of Surgeons of England; member and sometime President of the American Orthopedic Association; corresponding member of the British Orthopædic Society; member of the New York Surgical Society, etc. Second edition, revised and enlarged. Illustrated with five hundred and seven engravings. Lea Brothers & Co., Philadelphia and New York.

Those physicians who are interested in orthopedic surgery and those who are familiar with the first edition of Whitman's Orthopedic Surgery need no introduction to this edition. His first edition was generally recognized as the best work on orthopedic surgery for students and general practitioners that

had appeared since the time of Sayer. Naturally the first edition was soon exhausted. The author has utilized this opportunity by subjecting the work to a very thorough revision, in order to reflect its department to the date of issue. The consideration of new subjects, the more extended descriptions of others, and the addition of illustrative figures have resulted in a material enlargement of the book, but the general characteristics of the first edition have been retained.

Orthopedic surgery, although sadly neglected by some who claim to be surgeons, occupies a broad field and one of very great and growing interest. Its most distinctive advance in recent years has been toward the prevention of deformity, an advance that has been made possible by the better understanding of its predisposing and exciting causes. As a natural consequence, treatment has become more direct, more single, and more effective. This aspect has been especially emphasized in this work. As it is the general practitioner who first has the opportunity to recognize the disease in its incipiency, we urge all physicians who do not have an up-to-date work on orthopedic surgery to get one. In the selection of such a volume we do not know of any more suited than the present work by Whitman.

THE DOCTOR'S RED LAMP, book of short stories concerning the Doctor's Daily Life, Vol. II of the Doctor's Recreation Series; Charles Wells Moulton, general editor; pages, 343; Silk cloth, gilt top; Price, $2.50; Half Morroco, gilt top, $4.00; the Saalfield Publishing Co., Akron, Ohio, Chicago and New York.

This is the second volumn in the Doctor's "Recreation Series," which consists of twelve octavo volumns averaging four hundred pages each. The paper is of high grade, with deckle edge. The volumns are atractively and uniformly bound in English silk cloth and half Morrocco. The cover design is a unique and attractive feature. Each volumn contains four illustrations, appropriate in subject.

The letter-press, paper, binding, illustrations and *ensemble* of this set of books is in keeping with the cultivated and discriminating class of readers for whom it is especially and exclusively intended, namely, the Medical Profession. The Doctor's Red Lamp fully meets expectation aroused by reading the prospectus. This is the first attempt to bring together a collection of short stories by different authors concerning the daily life of the physician.

The stories were written by well-known authors in America and England and are twenty-two in number, prominent among which are the following:

The Surgeon's Moracti, by Joseph Kirtland.

The Doctor of Holyland, by Conan Doyle.

A Doctor's Story, by E. M. Davy.

John Bartini Watch, the Doctor's Story, by a Doctor of the Old School.

Ambrose Bierce, (a General Practitionier) Ian Maclaren.

On the Frontier, by Hy Seton Merriman.

Dr. Pennington's Country Practice, by Bertha Munroe.

We believe in the doctor taking unto himself some of the best remedies he advises for his patients, viz: rest and recreation, and the physician who cares a snap about reading can secure both of these remedies if he will take a little time to read "The Doctor's Red Lamp."

THE PHYSICIAN'S POCKET ACCOUNT BOOK, by Dr. J. J. Taylor, is a neat,

compact, easily kept and strictly legal book, carried in the pocket, always with you, showing each person's account at a glance. All entries are made but once, on the day when the services are rendered, in plain legal language, and require no posting or further attention. Published by the Author, 4105 Walnut street, Philadelphia.

By always being able to show all inquirers the exact state of their accounts wherever you may meet them, showing date and nature of each transaction, you will save more than enough in one year to buy account books for a hundred years. Being simple and complete, it will save you much needless worry as to their correctness.

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Show it to your lawyer or judge, and if he does not approve of it, send it back and get your money back.

The book contains Obstetric, Vaccination, and Death Records and Cash Accounts. The book is $4\frac{1}{2}$x$6\frac{3}{4}$ inches, containing over 224 pages. Prices: Bound in Leather, $1.00. Also bound in manilla boards with separate leather case. Price of case and two manilla books, $2.00. Subsequent manilla books to use in the case, 60 cents each; two for $1.00; three for $1.40. Also large size for desk or office use, $4.00. Address Dr. J. J. Taylor, author and publisher, 4105 Walnut street, Philadelphia, Pa.

LECTURES TO GENERAL PRACTITIONERS ON THE DISEASES OF THE STOMACH AND INTESTINES AS WELL AS THE ALLIED AND RESULTANT CONDITIONS WITH MODERN METHODS OF DIAGNOSIS AND TREATMENT, by Boardman Reed, M.D., Philadelphia, Pa., Professor of the Diseases of the Gastrointestinal Tract, Hygiene and Climatology in the Department of Medicine of Temple College, Philadelphia; Attending Phpsician to the Samaritan Hospital; Member of the American Medical Association, American Climatological Association, American Academy of Medicine, American Electro-Therapeutic Association; Foreign Member of the French Cociete d' Electrotherapie, etc.

Although several separate volumes on diseases of the stomach and diseses of the intestines, written by American authors and although several translations of similar volumes from German authors have appeared in close succession within the past few years, still this work by Boardman Reed will no doubt receive a ready welcome by the medical profession. It differs from all others published in that diseases of the stomach and diseases of the intestines are considered in one volume. The subject matter is presented in the form of lectures delivered by the author to medical class in the department of medicine in Temple College Philadelphia. The chief merit of this work and its strongest recommendation to the general practitioner is that it avoids minute and theoretical details and endeavors to present practical clinical information. While the general practitioner is unable on account of the manifold demands upon his time, is not expected to make the difficult diagnosis of digestive diseases, still he should be somewhat in touch

with the advanced methods and avoid humiliating mistakes and disastrous failures in treatment. It is in this connection that Dr. Reed's book has an unmistakable mission.

There is full discussion of appendicitis, both from a medical and surgical point of view and a valuable section on diseases of the rectum and answers by the well known specialist, Dr. Colier Martin. The lecture on movable kidney is very practical and the chapter on a Synptomatic Guide to Diagnosis will enable the reader to settle some puzzling questions of digestive diseases. The eighty lectures cover comprehensively the etiology, pathology, symtomology and diagnosis of gastro-intestinal affections. The binding, print, and plates are well done by the well known publishers.

FOUR YEARS UNDER MARSE ROBERT, by Robert Stiles; Major of Artillery in the Army of Northern Virginia; Second edition, $2.00, net. The Neal Publishing Company, New York and Washington.

"Four Years Under Marse Robert." Why "Marse Robert?" It goes without saying that the title is a term distinctively from the Old South, and fits both the life of the soldier and the slave, because both were based upon the principle of absolute obedience to absolute authority. Soldiers are very apt in the nicknames they give their favorite leaders; witness "Stonewall," "The Iron Duke," "Fighting Joe," "Marse Robert," and in General Lee's case the nickname is full of pathos and of of power.

Men who spoke habitually of their commanding general as "Marster" could not but feel the reflex influence of their habit upon their own character as soldiers. His place was to command; their's to obey.

> "Their's not to reason why,
> Their's but to do and die."

The feeling of reverence, trustfulness, admiration and love that was felt for General Lee by his soldiers is somewhat humorously put by one of his ragged veterans, who when he was discussing the doctrine of evolution with his fellows, remarked: "The rest of us may be descended from monkeys, but it took a God to make Marse Robert."

Another illustration of the reverence in which Lee was held by his soldiers that almost amounted to worship is afforded by the overheard conversation of two Calvanists in Confederate rags and tatters, in which one of them inquired of the other, who had just spoke of "Old Marster," whether he referred to the one at headquarters or the One up yonder.

The volumn is a delightfully written description of what actually fell before the writer's observation during the four years of the bitter struggle.

Major Stiles was the son of a Presbyterian minister, born in Georgia, but who lived from his boyhood until the breaking out of the war in New York City and in New Haven. At the breaking out of hostilities he went to Richmond, volu nteering in the artillery.

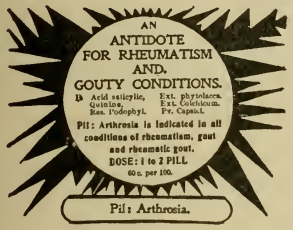
This is one of the most readable and delightful books of the war that it has ever been the reviewer's privilege to read.

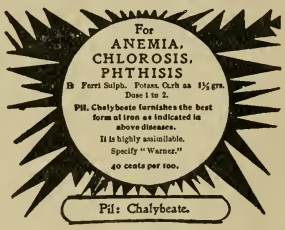
The book is nicely bound, with inlaid letters in gold and on the first cover page a photographic reproduction of an artilleryman in uniform. A more appropriate Christmas gift to some friend is difficult to find.

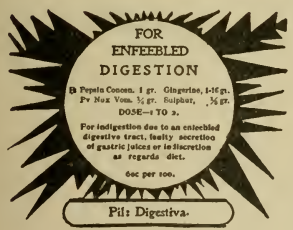
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Herpes Zoster.—Brodier in *Revue Francais de Medicine et de Chirurgie,* for December 14, 1903, states that treatment should begin with a saline purgative. The eruptions should be protected from friction and ointments or powders used, or better still dry or alcohol dressings. Salzwedel controls pain immediately by bandaging with 6 or 8 double bandages, saturated in alcohol, and covered with an impermeable protective. Painting with concentrated solutions of picric acid or silver nitrate is also efficacious. The two following ointments are by Bleuler:

R.

Boric acid 1 gramme (15 grains)
Starch 2 grammes (15 grains)
Zinc oxide.....2 grammes (15 grains)
Vaseline 16 grammes (½ ounce)

M. Ointment.

R.

Cocaine hydrochloride, 20 centigrammes (3 grains).
Vaseline ... 10 grammes (1-3 ounce)
Lanolin ... 10 grammes (1-3 ounce)

M. Ointment.

After opening the phlyctenules, a simple aseptic powder may be dusted thickly on and kept in place by a bandage. The powder should be renewed daily without washing the lesion. If the vesicles become infected, the following may be substituted for the simpler preparations:

R.

Boric acid 5 grammes (75 grains)
Iodoform.....5 grammes (75 grains)
Starch 30 grammes (1 ounce)
Zinc oxide ...10 grammes (1-3 ounce)

M. Dusting powder.

If there is much pain 20 centigrammes of cocaine hydrochloride may be added to the foregoing.

In the aged, the disease often causes agonizing pain, for which Brodier advises:

R.

Extract of stramonium,
Extract of hyoscyamus,
Extract of belladonna,
Of each 15 milligrammes (9-40 grain).

M. One pill; take four such daily.

Insomnia is treated with chloral hydrate, bromides, opiates, etc. Herpes zoster often leaves a severe neuralgia in its train, which may be treated with careful doses of aconite, gelsemium, acetanilid, etc.—*Therep. Rev.*

Migraine.—The following prescriptions are suggested for migraine by Bjorkmann (*Merck Archives*):

R.

Caffeinæ.. 0|25 (4 grn.)
Sodii salicyl 0|5 (8 grn.)
Cocaini hydrochl 0|02 (1-3 grn)
Aquæ 30| (1 oz.)
Syrupi simpl 10| (2½ drm)

To be taken at once. Especially active where trigeminal neuralgia accompanies the migraine.

For the distressing nausea and vomiting:

R.

Tr. zingiberis 4| (1 drm)
Tr. capsici gtts. xxxvi
Syrupi zingerberis 16| (½ oz.)
Aq. menth. pip., ad....90| (3 oz.)

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—*Therep. Rev.*

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R.

Vini ipecac |
Tinct. scillæ, aa ..minim x |65
Spts. etheris nit dr. ss 2|
Aq. chloroformi oz. ii 30|

M. Sig.—At one dose and repeat every four hours.—*Canadian Pract. and Rev.*

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THE SELF-CURE OF CONSUMPTION WITHOUT MEDICINE: With a Chapter on the Prevention of Consumption and Other Diseases. By. Charles H. Stanley Davis, M.D., Ph.D. N. Y., E. B. Treat & Co., 1904. 176 pp. 12mo. Price: Cloth, $0.75.

The subject of this volume clearly indicates that it deals with the hygienic and prophylactic phase of the question. In the preface the author states that the object of the book is to show how consumption can be cured in at least 95 per cent. of the cases without the use of medicine. The author also holds that consumption can be stamped out, and that there is no reason why any person not advanced beyond the second stage of the disease should die of consumption. We cannot call that a conservative statement, but the book should be in every family in our land. Its careful study by the laity will do much good, and the doctor who is familiar with the matter set forth in its pages can advise his patients to better advantage than the practitionier who knows only drugs.

THE REAL REASON — Thomas W. Lawson's motives in writing the story of Amalgamated.

Owing to the fact that thousands of people now reading "Frenzied Finance" in *Everybody's Magazine,* did not see the July "forward," in which Mr. Lawson explains his reasons for writing the articles, the publishers have reprinted in their department, "With the Publishers," in the December issue, the following paragraphs from the July number:

"My motives for writing 'Frenzied

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"My desire in writing 'Frenzied Finance,' while tinged perhaps with hatred for and revenge against the 'system' as a whole and some of its votaries, is more truly pervaded with a strong conviction that the most effective way to educate the public to realize the evils of which such affairs as the Amalgamated are the direct result, is to expose before them the brutal facts as to the conception, birth, and nursery-breeding of this the foremost of all unsavory offsprings of the 'system.' Thus they learn that it is within their power to destroy the brood already in existence and render impossible the creation of their like."

For Toothache.—Here is a fine toothache formula, which I have used with great success:

R.

Fl. ext. aconiti mx

Ol caryophyl

Chloroformi, aa dr. ss

M. Sig.—Saturate a small pledget of cotton with the drops and place in the cavity. Also rub some on the affected gum. F. AMMON, M. D.

Lawson Col.

For Barber's Itch.—J. J. Pringle advises epilation of about a square inch daily, followed by the application of diluted ointment of the red oxide of mercury.

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Prof. Wassermann's Lecture on Immunity.

Professor A. Wassermann of Berlin delivered an address on "Several New Points Concerning the Theory and Practice of Immunity" before the New York Pathological Society, September 28, 1904.

The first condition to be fulfilled by a substance which is to serve for immunizing against any toxin, he said, is that it must form a firm union with the cellular elements of the organism. Thus, we cannot immunize against stychnine because this poison does not form a firm chemical union with the cell, but may be readily dissolved out of the tissues of the poisoned animal. This is not so with a bacterial poison, *e. g.* tetanus toxin, which forms a firm union with the nerve cells which it affects. According to Ehrlich, the specific immunizing substances, which are formed in the animal body and are contained in the therapeutic serums, are simply those portions of the cells which have a specially marked affinity for the specific toxin which it is desired to neutralize. The parts of the system which receive and are acted upon by a specific toxin are called "receptors" —those portions of a toxin which carry the poison to the receptors are called "haptophores" and those portions of a toxin which represent the actual poison are the "toxophores." A "toxoid" is an attenuated toxin which has still haptophores, but no toxophores. It may be compared to a snake with its poison glands removed.

When a toxin is injected it unites with the specific receptors which possess special affinity for it. Then the law of over-compensation, declared by Weigert, is brought into play, and there is a great overproduction of receptors. When this has reached a sufficient degree, the receptors are thrown off as ballast, and circulate in the blood as "anti-bodies." Hence the specific sera are nothing but "receptors."

The process of immunization therefore takes place in three stages: (1) The union of toxin with receptor, (2) the overproduction of receptors, and (3) the elimination of receptors in the blood. To prove the occurrence of the first two of these stages has been a matter of some difficulty in the past, but the speaker said he had succeeded in doing this recently, with the aid of his assistants at the Berlin Institute for Infectious Diseases.

He injected an old attenuated tetanus toxin which he had kept since 1896 into guina pigs, and found it to be so weak that no tetanis resulted. This toxin was thus really a "toxoid," for it did not possess any "toxophores" or real poisons, but merely the "haptophores" or poison-carriers. Of this tetanus toxoid he injected $\frac{1}{2}$ c.c. into guina pigs. He then injected virulent tetanis toxin fifteen minutes after injecting the immunizing dose into these animals, and found that a larger amount of the toxin was needed to kill them than to kill the control animals. This was because a portion of the toxins had already been tied to the receptors. When the virulent toxin was injected three hours after the weak toxin the animals required less of the former to kill them than those of the first series, in fact less than normal animals. This meant that the second stage of immunization, the increase of receptors, had set in when the virulent tetanus toxin was injected. The third stage —elimination of receptors—is not a function of the haptophores. For this toxophores must be present.

The question as to the relation of antitoxins to toxins has been widely discussed and studied. Arrhenius and others tried to apply it to the laws of pure physics and mathematics, but the speaker did not think that these could be successfully made use of in this connection in a living being. He was able to show by experiments that antitoxin first forms a loose chemical combination with toxin, and then gradually enters into a closer and firmer union with the latter. It is well known that tetanus toxin is absorbed only through the nervous system, *i. e.* it is neurotropic, while tetanus antitoxin is absorbed through the blood channels. He injected a mixture of toxin and antitoxin into guina pigs, and no tetanus followed. Then he injected the same mixture into guina pigs after having injected a solution of adrenalin into the area attached (the hind leg). These animals did develop tetanus because the toxin went by the nerve route, while the blood route was closed in virtue of the concentration of the capillaries by the action of the adrenalin, so that the antitoxin could not get in. The antitoxin was therefore in loose chemical combination with the toxin. But this took place only when the mixture in the bottle had been allowed to stand for a short time. When the mixture of toxin and antitoxin was allowed to stand over half an hour, the combination was firm, and the guinea pigs did not develop tetanus in these conditions. The combination became firm within fifteen minutes if the mixture was warmed, or if there was an excess of antitoxin in it.

The practical applications of immunization, the speaker said, were, of course, of the greatest interest. One great difficulty encountered hitherto in serum therapy was that some serums immunized only against a certain "race" or species of germs. This was because the bacterial cellbody was composed of different elements which are called "partial groups." Each of these elements has its corresponding receptor in the serum. Now various races of germs of the same species have different partial groups of elements in their bodies—just as each variety of oak is built slightly different, and yet all are of the same species. Some receptors are common to all, but some are present only in a certain race of the same variety of germs. The conclusion is, that, in order to obtain a serum of general utility, we must use colonies of a large number of races of germs—as, for example, diphtheria bacilli taken from many different children. Very good results have already been attained in the treatment of swine plague with this method.

About a year and a half ago the speaker prepared a new diphtheria serum on these principles. The old serum is only antitoxic, and does not act upon the bacilli proper. This new serum is also agglutinating and directly affects the germs. It is prepared from cultures of many "races" of germs, and therefore, is called "multipartial." One part in 5,000 agglutinates diphtheria bacilli.

The speaker, and also Martin of Paris, had dried this serum, powdered it, mixed it with sugar of milk, and made tablets of it, which, when dissolved in the mouth of diphtheria convalescents who had still Loeffler bacilli in the throat, agglutinated these germs. Then a gargle was given, and the germs were quickly removed while ordinarily it took two weeks for them to disappear. The action of the new serum tablets was mechanical, and also stimulating to phagocytosis. The white cells are attracted and swallow large numbers of the bacilli, thus removing them

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from the infected spot. The new method is also used in nasal diphtheria in children in the form of a powder blown into the nose, an alkaline wash being subsequently used to remove the germs. Experiments with this new serum in Berlin and Paris, Dr.. Wassermann said, had given very favorable results.—*Med. Record.*

The Christmas Delineator.

The December *Delineator,* with its message of good cheer and helpfulness, will be welcomed in every home. The fashion pages are unusually attractive, illustrating and describing the very latest modes in a way to make their construction during the busy festive season a pleasure instead of a task, and the literary and pictorial features are of rare excellence. A selection of Love Songs from the Wagner operas, rendered into English by Richard de Gallienne and beautifully illustrated in colors by J. C. Leyendecker, occupies a prominent place, and a chapter in the Composers' Series, relating the romance of Wagner and Cosima, is an interesting supplement to the lyrics. A very clever paper entitled "The Court Circles of the Republic," describes some unique phases in Washington social life is from an unnamed contributor, who is said to write from the inner circles of society. There are short stories from the pens of F. Hopkins Mary Stewart Cutting and Elmore Elliott Peake, and such interesting writers as Julia Magruder, L. Frank Baum, and Grace MacGowan Cooke hold the attention of the children. Many Christmas suggestions are given in needlework and the Cookery pages are redolent of the Christmas feast. In addition, there are the regular departments of the magazine, with many special articles on topics relating to woman's interests within and without the home.

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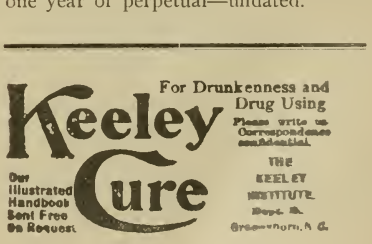
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Ophthalmology is the title of the latest medical periodical to reach our table. It is a production of the old editorial staff of the Annals of Ophthalmology immediately after their resignation from the latter. The new journal—Vol. 1, No. 1—presents a handsome appearance; 188 pages of text. Subscription price, $5.00 per year. The journal is edited by H. V. Wurdemann, M.D., managing editor and publisher; Nelson M. Black, M.D., assistant editor; 105 Grand Avenue, Milwaukee, Wis., U. S. A.

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The *Medical News* Visiting List for 1895, published by Lea Bros. & Co., of Philadelphia and New York, is a neat and compact book, well adapted for the use to which it is to be put. There are many candidates for the doctor's favors of this class on the market and this is one of the standards, having been before the public for eighteen years. It has the usual tables and special notes of important things we ought to remember but do not always, and which are convenient to have for ready reference. In addition it has pages ruled for keeping a daily record of all work—vaccination and obstetric records, and various memoranda. The thumb index and its neat and compact appearance are special features that will be appreciated. It is published in several forms for 30 to 60 patients per week, and has either a daily record for one year or perpetual—undated.



Clippings.

Medical Education in Japan.—Japan, says the *Medical Fortnightly*, has 31,000 physicians and eight medical schools.

For Syphilitic Allopecia.—Fox directs to apply a five per cent. oleate of mercury ointment.

Tinea Kerion.—The tricophyton fungus disease is treated by Bulkley by epilation and washing with one per cent bichloride solution.

Defluvium Capillitii —The temporary thinning of the hair after fevers is treated by Fox with a lotion of tincture of cantharides 10, glycerine 2, and cologne water to make 100 parts.

Eczema Capitis.—The "milk crust" of children is treated by Fox by the local use of a mixture of one part of oil of cade to three parts of oil of sweet almond.

Black Urine.—The *Medical Council* states that melanuria is often observed after eating damson plums. When taking ferric chloride or nitric acid, the urine may turn black after it cools.

For Threatened Baldness —Bartholow recommended the following: R Ext. jaborandi fl. oz. i; tinct. cantharidis dr. iv; linimentum saponis q. s. ad. oz. iv: Rub into scalp once a day.

Cardiac Neuralgia.—In neuralgias of the heart Abbott (*Alkaloidal Clinic*) gives strychnine arsenate in moderate doses in the intervals, continued for months.

For Lupus Vulgaris.—Jackson advises a nutritious diet, cod-liver oil and iodide of iron; also multiple scarification deep enough to penetrate all softened tissues and repeated in five or six days.

Prevention of Baldness—Brush the hair twice a day with a fairly stiff brush, says Robinson, and tip it every other week. Wash the scalp at intervals with warm rain water and a good simple soap.

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Fragilitas Crinium—Cleavage and friability of hairs is due to local scalp disease (seborrhea), fevers or debility. Jackson directs to cut hairs above cleft and keep scalp in good condition. Shaving may be of service in beard cases.

Fermentation or Aseptic Fever.—Nancrede recommends cold sponging, laxatives and free diuresis induced by the ingestion of large amounts of water by mouth or rectum; also careful regulation of diet.

For Strumous Children.—Shoemaker prescribes the following: R Hydrarg. chlor. corros. gr. 1-48; tinct. gentianæ m. i; syrupi aurantii m. x; aquam q. s.: A teaspoonful four times a day at mealtime.

Meteroism in Pneumonia.—H. Schiller (*American Medicine*) states that meteroism of considerable degree is one of the worst prognostic symptoms in pneumonia. When it is distinct it indicates a severe and often deadly course.

Pseudoleukemia.—The modern and most successful treatment is the use of the x-rays. Arsenic, iron, strychnine, phosphorus and cod-liver oil are of service as adjudvants. The diet should be nourishing and largely of animal origin.

For Chlorosis.—Hershey prescribes fresh pills of ferrous sulphate and potassium carbonate aa. 1½ grains t. i. d. p. c. in occasional cases. Bartholow used the following: R Ferri sulph. exsic. gr. ii; strych. sulph. gr. 1-40: One pill t. i. d.

Dermatitis Papillaris Capilitii.—Keloid acne is characterized by hard, congested papules, changing to uneven tumors, over which the hair is lost or bunched and crusted by the offensive discharge. The usual site is the back of head and neck. In treatment Stelwagon advises stimulating applications particularly sulphur and ichthyol. Depilation is also of value.

After-Treatmeut of Puerperal Fever.—E. P. Davis recommends fluid extract of ergot m. xx. and strychnine sulphate gr. 1-60 every six hours night and day. He considers these drugs indispensable.

For Scrofulous Children.—R Hydrarg. perchloridi gr. 1-28—1-32; liq. potass. ars. m. i-iv; tinct. ferri. chlor. m, ii-vii; acidi phosphor. dil. m. iv-xv; syr. limonis q. s.: One-fourth to a dram in water after meals.—Goodman.

Referred Pains—Says the *International Journal of Surgery:* Pains over the iliac crests, the groins, the front of the thighs, the inner aspect of the legs or feet, or the big the, are often evidences of lumbar caries.

Anchylostomiasis—Friedrich Schultze recommends the ethereal extract of male fern, 2 to 2½ drams at one dose, preceded and followed in a few hours by castor oil. If this treatment fails, give four or five grams of thymol in a little wine, cognac or beer.

Treatment of Paronychia—Incision is usually required. In mild cases (*Gould and Pyle's Cyclopedia*) place arm in sling and keep finger constantly wet with boric acid lotion, followed by boric acid ointment. Quinine and other tonics are indicated.

Note Results—Berberine, says Waugh (*Critic and Guide*) is the direct remedy for dilated stomach. Give, he says, one grain of it daily for a month to women with uterine prolapse, who do not care to continue wearing a pessary, and note results.

Bleeding Piles—Boas (quoted in *Medical Standard*) has cured 25 cases of rebellious hemorahoidal bleeding by the daily injection of 20 cc. of a ten per cent. aqueous solution of calcium chloride just after the morning evacuation of the bowels. The injections should be continued two or three times weekly after the bleeding is arrested. They have no influence on the hemorrhoid nodules.

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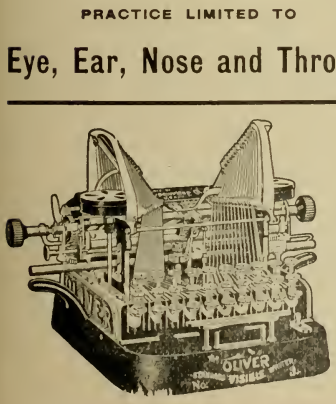
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Seborrhea Oleosa.—In the ordinary or mixed type, Fox tells us to shampoo twice a week, in the morning, with tincture of green soap, and apply each evening a mixture of 10 parts of oil of sweet almond, 1 part of carbolic acid and 100 parts of alcohol, with enough oil of citronella to perfume.

Treatment of Alopecia Areata.—Nervine tonics, and equal parts of bay rum and tincture of cantharides as a lotion night and morning, are recommended by Fox. He also uses oleate of mercury locally, and if this fails, the strong liquor ammonia or other stimulating wash.

Conglomerate Superficial Perifolliculitis.—This appears as a diffuse, roundish red patch, with pustules or a conglomerate patch of small red papules, at the back of the hand or wrist. Stelwagon instructs to press out secretion, cleanse and apply antiseptic salves or lotions.

Onychomycosis.—Fungous disease of the nails may be due to favus or tinea trichophytica. Mycelia and spores are to be found in the scrapings. Stelwagon directs to keep nails closely cut or pared and apply solution of mercuric chloride (1 to 5 grains per ounce) several times a day, or a dram to the ounce solution of sodium hyposulphite.

Ungual Ulcers.—These may arise from the chloral habit (red spots on back of hand) or from handling irritating drugs. The simultaneous ulceration of a number of nails has been noted in syphilis, syringomyelia and Morvan's and Raynaud's syndromes. A boric acid or other mild ointment is the best local application.

For Hypertrichoses.—To remove unwelcome hairs from the female physiognomy, Fox directs to use a galvanic battery of 16 to 20 cells, insert a sharp, small needle to the root of the hair and connect with the negative electrode; after 10 to 20 seconds pull out the dead hair with forceps.

For Dandruff.—Barie directs to rub the hairy scalp every night with a 1:30 solution of mercuric chloride in alcohol. Bronson prescribes an ointment of ammoniated mercury 20 grains, calomel 40 grains, and petrolatum one ounce. Apply once or twice a day. This, he says, is excellent in simple dandruff, and should be combined with an occasional shampoo.

Premature "Idiopathic" Alopecia.—This form of baldness affects the forehead and vertex. It is often hereditary and is slowly progressive. Stelwagon recommends the following lotion: R Tinct. cantharides dr. iv, tinct. capsici oz. ss., olei ricini dr. ss.; alcohol ad. oz. iv: Rub in thoroughly daily or every second or third day.

Lupus Erythematosus.—In the early stages Jackson directs to use a lotion of one dram each of zinc sulphate and potassium sulphuret, three drams of alcohol, and rose water to make four ounces. Green soap or its tincture, well rubbed in with flannel, should be used in more chronic cases; also pure carbolic acid or multiform punctures by electrolysis.

Anemia of Acute Nephritis.—Bruce prescribes as follows: R Ferri et ammon. cit. gr. v; potassii cit. gr. xv; ext. scillae fl. m. i; spt. eth. nit m. xxx; syr. aurantii m; aq. dest. ad. oz. i: Take t. i. d. after meals. For anemia following acute nephritis he gives: R Tinct. ferri chloridi m. x; tinct. digitalis m. v; spt. juniperis m x; glycerini m. xxx; aq. dest. ad. oz. i: Take t. i. d. after meals.

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Chlorosis of Fecal Intoxication.—Andrew Clarke recommended a combination of one-half grain each of aloin, iron sulphate, ext. belladonna, ext. nux vomica, ipecac, myrrh and soap, giving one pill of this composition an hour before the last meal should bowels not act during the day.

Falling of Hair Following Erysipelas.—After cutting the hair short, Shoemaker uses the galvanic alternated with the faradic current every day or two, and singes the hair ends every two or three weeks, if the hair is dry and lustreless and the glands plugged up. He also applies equal parts of oil of ergot and fluid mercury oleate.

After-Treatment of Post-Partum Hemorrhage.—Buchtel uses hypodermoclysis of normal salt solution under the breast in sufficient quantity to replace lost blood, and gives one drop of fluid extract of cereus gradiflora every 15 minutes till the normal color is restored. He orders frequent feeding with freshly prepared bouillons and prescribes strychnine arsenite in small doses during convalescence.

Pityriasis Rubra Pilaris.—The follicular form of pityriasis appears as brownish or yellow-red pinhead point papules with a horny central spine and fine white scales, forming plaques about the hair follicles. Hardway recommends pilocarpine by the mouth or hypodermically for excessive dryness of the skin; also sodium arseniate internally in increasing doses; soothing pastes and lotions for inflammatory condition; tar and pyrogallic acid in more chronic states; and salicylic acid plaster for thickened patches on the palms and soles.

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Puerperal Endometritis and Endocolpitis.—Hirst advises frequent repeated irrigations of the whole genital tract and if accessible touch with silver nitrate solution a dram to the ounce. In all cases G. E. Herman directs to support the patient's strength with easily digested food and alcohol, using quinine for the nervous system and opium for pain. If the temperature is very high, he uses tepid baths, tepid sponging or the wet pack.

Leukemia.—Osler recommends fresh air, good diet and abstention from worry and care. Arsenic in large doses is the best remedy; quinine when malarial history. Now and then inhalations of oxygen are of value in some cases. Thornton gives two or three ounces of bone marrow (taken from bones after boiling) daily, or ten grains of dried red bone marrow three times a day. Hartshorne prescribes dilute nitromuriatic acid, 10 to 20 drops in a wineglassful of water t. i. d.

Treatment of Psoriasis.—Van Harlingen directs to remove scales with a solution of one dram of salicylic acid in four ounces of alcohol, well rubbed in, or with spiritus saponis alkalinus (two parts of green soap in one part of hot alcohol—filter) used as a shampoo. Then rub in well with a soft brush a mixture of one dram of oil of cade to the ounce of oil of almond; or apply an ointment of ammoniated mercury, 20 to 40 grains to the ounce.

Bleeding Stigmata. — Hematidrosis, or ephidrosis cruenta, consists in a bloody secretion from the sweat glands, sometimes preceded by erythema or miliaria and accompanied by malaise and slight fever. The common cause is hysteria. It may also be due to imposture, epilepsy, blood dyscrasiæ, vicarious menstruation or malarial paroxysms. The points of election are on the face, ear, breast, navel, hands and feet.

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